The Builder.

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Ditto: view from below Westminster Bridge ..... Drawn by Mr. E. B. Lamb.
Design for a Fireplace ..... By Mr. Herbert Raine.
House, Sloane-street ..... Mr. R. G. Hammond, Architect.

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The Institute and Fellowship.

THE record in the *Journal* of the Institute of Architects of the discussion at the special general meeting at the end of last month, which was in an official sense a private meeting, is rather depressing reading for those members who are concerned for the welfare and dignity of the Institute.

The discussion we refer to was one which arose on the Fellowship question, in reference to two resolutions of which notice had been given, and which were moved from the chair. The first one concerned the alteration of the by-laws necessary to provide that after December 31, 1906, everyone desiring to become a Fellow shall be required to have passed the examination qualifying him to be an Associate, or should be elected from the class of Associates, leaving the Council power to dispense with such examination under special circumstances. This legislation was, of course, inevitable in the long run, for it could not be expected that those who had passed an examination to become Associates would contentedly see men, perhaps not much older than themselves, but who could show the required period of practice on their own account, passed into the higher grade of membership without an examination. That is all plain sailing; the doubtful, or more than doubtful, element came in with the second resolution, which shall not be quoted here as originally proposed, since it is better that its terms should not be known beyond the circulation of the Institute *Journal* among members. It is sufficient to say that the effect of this extraordinary resolution was that everyone eligible as a Fellow had better be incited to join the Institute in the meantime, before the doors were barred by an examination, and that it had better be made as easy as possible for them to do so; and this purport was expressed with a simplicity and directness which took away one's breath. A resolution more damaging to the credit of the Institute we can hardly imagine, nor can we understand how the Council could be so short-sighted as to propose it in the terms they did. After various proposals in the course of the discussion, it was finally passed in this form: "That during the intervening period every architect eligible under the Charter for election who desires to join the Institute as a Fellow should be encouraged to do so."

This, though a great improvement on the crude form in which the resolution was first proposed, and which is better forgotten, still practically means the same thing—viz., that the Council are anxious to increase the number of Fellows, and that they propose to make their election as easy as possible in the interval between now and the institution of the examination test. To have passed such a resolution even in that modified form seems a very strange and unadvisable confession of weakness; nor is it likely to attract any but an inferior class of men. These, if they think it desirable to have "F.R.I.B.A." after their names, will no doubt be glad to take advantage of this interim of promised benevolence; but men of a superior order will hardly feel much disposed to apply for membership during a period when it has been plainly implied that Fellows are much wanted and that election will be made easy for them!

The origin of this ill-advised resolution seems to have been an impression that the Council, in requiring those who sought election as Fellows to submit drawings and photographs of executed works, had exercised a kind of closure against people who were eligible under the Charter, but whose designs did not please them. As far as we have been able to ascertain, there is not much ground for this idea; some applications have, we believe, been refused because the drawings accompanying them were of such a kind that it was not thought creditable that the author of them should be allowed to become a Fellow of the Institute; but we gather that they were rather extreme cases. Some eminent architects were very anxious at one time that the election as a Fellow should be, like election as a Royal Academician, a kind of testimony of superior talent; but we do not think that is practically workable or suitable to what is after all a professional society. Fellowship ought therefore to follow on a certain standard of professional position, but it is quite right it should be in part dependent on the quality of work done, and that the Council should be at liberty to refuse an applicant whose designs are of a standard which would discredit the Institute, even if his position was in accordance with formal regulations. They will hardly raise the status of the Institute by abandoning this wholesome practice.

CHRISTCHURCH HARBOUR.

THE vagaries of the sea are well illustrated by the changing outlines of the coast, especially on the eastern and southern shores of Great Britain. Sometimes eating away land that can ill be spared, at others piling up shingle and sand where they are not wanted, profiting always by the negligence or folly of man, seeking persistently and relentlessly to undermine his protective works, and setting at naught the efforts of the map maker, the sea works its will with our little island.

A curious example of the way in which the sea disregards the rights of landowners and the interests of those engaged in the fishery industry is to be found at the present time in the neighbourhood of Christchurch. In former times the shingle travelling along Bournemouth Bay was arrested by the promontory known as Hengistbury Head, which, with the Beerpan Rocks extending seaward, formed a natural and most efficient groyne, and collected two extensive mounds of shingle on the west side, which extended as far as Double Dykes. But the eye of covetous man was set on the ironstone which occurs in seams of between 3 ft. and 4 ft. in thickness at the base of the cliff. Large quantities were taken away, and between the years 1847-1854 some 400 ft. of rock was removed.

After the demolition of this groyne the two mounds of shingle began to disperse and to move round the headland to the spit at the western side of Christchurch Bay. Behind Hengistbury Head, and sheltered by it from the south-west winds, is the entrance to Christchurch Harbour. Only the south-west side is thus protected, for the high land soon gives way to sand dunes stretching to the Haven at the outflow of the two rivers, the Stour and the Avon. The sand spit at Hengistbury, reinforced by shingle drifting round the point, has been extending for years past, and has now grown out for a length of more than one and a half miles in a north-easterly direction across the former mouth of the harbour, so that the entrance is no longer in the position shown in most of the maps available for reference, but between the elongated spit and another sandbank projecting from land on the other side. The spit is fully a quarter of a mile wide near the headland, and upon it sandhills have accumulated to a height of between 20 ft. and 30 ft., and even the narrower part of the spit is well above the high-water level of spring tides. Fig. 1, reproduced from a map dated

Fig. 1.

1858, indicates the general outlines of the harbour about thirty-five years ago, and Fig. 2, taken from Mr. Wheeler's work on "The Sea Coast," gives some idea of the conditions prevailing a year or two back.

But the sand spit at the mouth of the harbour continues to grow, and has extended half a mile within the last few years. What used to be the seashore at Mudeford has been transformed into the bank of a freshwater river, the opposite

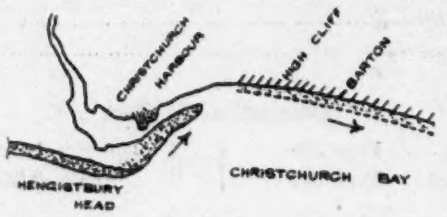

Fig. 2.

side of which is formed by a long sandbank rising 5 ft. or 6 ft. above sea level and measuring 50 yards in width at its narrowest point. The arrows in Fig. 2 show the direction of the littoral drift, and it is tolerably certain that but for the action of the river the harbour would have been closed up long ago, as happened at Pagham Harbour; but the river has been unable to prevent the formation of a bar at the mouth, which renders navigation well-nigh impossible even for fishing boats. At Christchurch, however, the scour of the river has prevented the sand from collecting along the beach to form an extended foreshore. Tidal action on one side, and the action of the river on the other, conduce to lengthen the sand spit, the tides driving the sand towards the harbour mouth and the stream forcing it forward in the effort to gain access to the sea.

The effect of the ever-growing sandbank is sufficiently serious to various classes of the community in the neighbourhood. All around the town of Christchurch meadows are flooded, roads are submerged, and the river channels are indistinguishable, for the water cannot get away with sufficient rapidity, owing to the obstruction at the harbour mouth. The bar which has formed at the mouth of the harbour makes it a matter of difficulty for the fishermen of Mudeford to get their boats to sea.

At the foot of the cliffs above the bar the old foreshore has been cut out by the scour of the river, the cliffs are being undermined, and a landslip is seriously feared.

The position is singular in more than one respect. In the first place there is the unusual spectacle of two foreshores at Mudeford, one on the original coastline and the other along the outer boundary of the sand spit. Summer visitors to the coast have found the shore converted into the bank of a river, and sea-bathing is now possible only from the spit. Next, it seems difficult to suggest a remedy for the existing blockade, not so much from an engineering standpoint as from considerations of legal character. If the bank were cut through, landowners might be in a position to demand recompense for any injury done to their property or to cover the cost of protective works. There are various other rights and privileges connected with the river and the harbour that must be respected. Knowledge of these checks private enterprise, and there does not appear to be any public authority with adequate power for dealing with the problem.

The present condition of the harbour is not altogether unprecedented, for it is said that there have been similar extensions of the sand spit in former times, and that in each case the obstruction was broken through by natural agencies. The duration of the bank on previous occasions has been about twenty years, and there is a hopeful impression that the present bank may be dissipated at no distant date. A sudden outpouring of the river, a high spring tide, and a violent gale from the south-west might certainly combine to break up the spit, but it would be much more businesslike if the authorities and other persons concerned could agree to invoke the aid of a competent engineer with the object of raising the existing blockade, and of taking such measures as a careful examination of the local conditions might show to be required for preventing a recurrence of the present trouble.

FLOODS AND THE LONDON MAIN DRAINAGE.

THE exceptional rainfall of last year was the cause of many floods in various parts of the country, and it is not surprising that certain districts in London suffered on more than one occasion. During the four months June to September the London County Council received more than a thousand complaints of floodings from local authorities and from the owners and occupiers of property, and in all probability those who took the trouble to write to the Council represented only a small proportion of the total number of persons who were injuriously affected by the excess of storm-water. On July 23 the abnormal rainfall of 3·59 in. was recorded at one of the London pumping-stations, and throughout the summer storms recurred at such frequent intervals that on several occasions the water had not subsided in the sewers after one storm before another downpour came. Obviously the excessive rainfall was the primary cause of the floods, but there were also secondary or contributory causes to which attention should be drawn. Many basements have been constructed at such a low level in relation to the sewers that it is impossible to drain them properly, and when the sewers are fully charged the combined storm-water and sewage rises through the drains and floods the basements. Property-owners themselves are in many cases to blame for these mishaps; in order to obtain a lofty story below ground they have deliberately run the risk of having it flooded. The sewers cannot be lowered to suit the convenience of a few individuals, and if they object to the floods they ought not to object to bear the expense of making their basements watertight. On the other hand, they may fairly claim that the public authority ought to take such measures for dealing with storm-water that the normal flow of sewage is not interfered with; it is one thing to be flooded with storm-water, but quite another thing to be flooded with foul sewage.

This brings before us another of

the contributory causes to which we have referred. For good or ill, the sewage and surface-water of London are discharged into the same conduits, and, while the sewers are of sufficient capacity to carry off the sewage, many of them are not large enough to take also any great quantity of surface-water. This is the crux of the problem which the London County Council is called upon to solve. There can be little doubt that the separate system of sewerage would be the best for a great city situated as London is; it would go a long way towards preventing the flooding of basements with sewage, and would simplify the treatment of the sewage at the outfall-works. But the cost of a second system of sewers would be so enormous that even those Councillors who think imperially would not venture to advocate that it should be undertaken. Old cities have their disadvantages, and London is a conspicuous example. Narrow and inconvenient streets, a defective water-supply, inadequate sewerage, vested interests of every kind, are part of the burden which the past has laid on the back of the present; they are like the heavy debts for which the heir becomes responsible when he succeeds to his thriftless father's property. Up to the year 1815 no sewage was allowed to be discharged into the streams of London; these were reserved for surface-water, and cesspools were used for the reception of sewage. But in 1847 the great mistake was made; an Act of Parliament was passed, and houses were drained into the streams which discharged into the Thames. The streams became so foul that their natural channels were gradually replaced by brick culverts, and the combined system of sewerage was thus initiated. Later works, including the great intercepting sewers of Sir Joseph Bazalgette, have merely extended the system, which, we fear, it is now unfortunately too late to alter.

A third contributory cause of floods is the growth of London and the rapid covering of the natural surface of the ground with buildings and impervious paving. Year by year the sewers receive an increased quantity of sewage and a greater proportion of the rain which falls in the County of London, and it is evident that many of the sewers are now too small to carry off with sufficient rapidity the storm-water and sewage draining into them.

The London County Council has had this problem constantly before it. Since the Council was constituted in 1888 nearly nineteen miles of new relief-sewers have been laid, in addition to sewers which form part of the general extension of the system, and nearly two millions have been spent on these new sewers and on pumping-stations and other works for the prevention of flooding. In December 1899 the Council adopted without a division a scheme submitted by the Main Drainage Committee for the enlargement of the main drainage system, at an estimated cost (in round numbers) of 3,000,000*l.*, and one-third of this work is either completed or in progress. In addition to the works included in this scheme, the Committee recently submitted to the Council a report containing suggestions for other relief-works, the cost of which is roughly estimated at about three-quarters of a million, exclusive of the cost of acquiring sites for new pumping-stations and outlets into the Thames. At present, however, the Committee merely asked for power to spend 5,000*l.* in the preparation of plans and for other incidental expenses in connexion with the work, and their request was granted.

The report, which is dated February 4, 1904, describes some of the more important works which appear to be urgently required. The first is a new relief-sewer from Holloway-road to the River Thames, the total length being over four miles, and the estimated cost, exclusive of the outlet, 250,000*l.* This sewer will discharge by gravitation into the Thames at all states of the tide; it will receive the storm-overflows from certain existing sewers and from the new middle-level sewer which forms part of the scheme for the extension of the main drainage system, and will, it is believed, prevent the floodings which have so often occurred in Mare-street, Hackney, and less frequently in the area between King's Cross and Blackfriars Bridge. A new sewer is also included for the prevention of floodings in the neighbourhood of Stroud Green-road and Blackstock-road, Stoke Newington; but this is a comparatively small matter, the estimated cost being only 25,000*l.* Nearly three times this amount is required for the extension of the Hackney Wick relief-sewer, in order to improve the drainage of the north-eastern part of Hackney, including Upper and Lower Clapton. In the West it is proposed to construct a new sewer, at a cost of 20,000*l.*, to take the storm-water from the middle-level sewer near Notting Hill to the Counter's Creek sewer, which runs to the new pumping-station at Lot's-road, Chelsea. By this and other works relief will be afforded to the districts of Fulham, Hammersmith, Kensington, Chelsea, and Paddington.

South of the Thames, in addition to the new sewers included in the scheme for the extension of the main drainage system, it is proposed to construct two new pumping-stations in Wandsworth and Southwark, at a cost of 230,000*l.*, exclusive of the sites, etc. With reference to the floodings in Loampit Vale, the Committee makes no recommendation, as it has not yet been able to come to an agreement with the Metropolitan Borough Council of Lewisham. The sum of 75,000*l.* is included for smaller relief-works north and south of the Thames, but details of these are not given.

That these works when completed will do much to prevent floods there can be no doubt, but it is evident that some time will elapse before they are even begun. The plans have not yet been prepared, and the Committee will have to submit another report with revised estimates before the Council's sanction can be asked or obtained for the commencement of the works. The Stock Exchange does not at present regard municipal loans with much favour, and the Finance Committee of the Council is evidently averse from asking the Council to commit itself to the expenditure of another million for drainage-works, unless retrenchment is practised in other directions. In commenting on the report of the Main Drainage Committee, the Finance Committee "feel it to be their duty to again refer to the fact that the present and prospective financial conditions tend to show that the provision of funds to meet the Council's heavy commitments will be a difficult operation, and that the larger the amount which the Council may find it necessary to raise the higher will probably be the price to be paid for it." The suggestion is then thrown out that it may be necessary "to take into serious consideration the postponement of the carrying-out of other schemes which may not be of such an urgent character as that now submitted by the Main Drainage Committee." To which suggestion the great majority of ratepayers will probably hope that good heed will be given.

NOTES.

Water Power. Referring to our recent remarks upon the utilisation of water for power purposes, we may call attention to the action of the French Government in this respect. After careful inquiry, that Government published a report showing the entire water power available throughout the country, with the result that a very large impetus has been given to local industries. In a pamphlet issued by the Minister for Industries it is stated that, whereas the last century showed the destruction of the individual worker and the concentration of mechanical power, the new century has opened with the dissemination of power and the bringing back of work to the homes of the people. In the neighbourhood of Lyons a whole mountain-side has been filled up with separate cottages, each occupant having supplies of electrical energy from the city and being engaged in making fabrics that were formerly produced only in large factories. We are quite aware that Great Britain does not possess such facilities for the production of electricity by water power as are to be found in some parts of France, but it is quite certain that the natural advantages evidenced in many parts of England, Scotland, Ireland, and Wales might be much more fully utilised than they are at present. The subject is one of the utmost importance, and deserves the serious attention of those who desire to aid the progress of industry and to bring the people back to the land.

Landlord v. Tenant. In our issue of August 15, 1903, we commented upon the case of Harman *v.* Ainslie, in which Mr. Justice Wright decided that a proviso in a lease, giving the landlord the right to re-enter upon the premises on breach of any covenant to be performed by the tenant, did not apply to a breach of a negative covenant, such as covenants not to sublet or covenants not to carry on a particular trade upon the premises. The ground of this decision was that a negative covenant could not be one "to be performed" by the tenant. The Court of Appeal have now reversed this decision, holding that the word "performance" means the observance of an obligation and

covers both classes of covenants. This judgment is satisfactory, for the former decision only would turn on the omission of the word "observe" in addition to "perform," which is usually found in clauses in leases dealing with forfeiture. It is curious that this question should have remained in uncertainty until the present day, although it has often been discussed, and the decision of the Court below was based on a very old case, which decided such a clause could not apply when the right to entry was given if a tenant made default in a covenant "after thirty days' notice" and the tenant had made some alteration in the structure, since the landlord was hardly likely to give a thirty days' notice not to alter the structure.

The Private Sidings Bill.

THERE are several questions which were dealt with and, it was fondly hoped, finally settled, by the legislation of a few years back, which are still a fruitful source of controversy and litigation between railway companies and their customers. One of these matters—in which some of our readers are doubtless interested—is the liability of railway companies with regard to private sidings; and this subject occupied the attention of the House of Commons last week. Several actions, brought at the outset to secure rebate for "terminal" services and accommodation, have turned on the question of the "reasonable facilities" which railway companies are supposed to give in connexion with the construction and maintaining of private sidings. It would appear that the present state of the law on this subject is so uncertain and indefinite that even experts like the Railway Commissioners have had their decisions reversed by the Court of Appeal. This has occurred both in England and Scotland, and in these circumstances a bill has been introduced by the representatives of the sidings owners in the House of Commons, with a view to defining the rights of traders and the obligations of railway companies. The bill was read a second time on Friday last week, and referred to the Standing Committee on Trade; and Mr. Gerald Balfour promised, on behalf of the Board of Trade, to give impartial consideration to any amendment which might be suggested by the traders or the railway companies. Although a measure of this nature attracts but little public attention, it is calculated to prevent a great deal of disputing and litigation. But, judging from the small measure of success which has attended past efforts in the same direction, the "definitions" must be exceptionally clear and unmistakable.

Drain or Sewer.

MR. JUSTICE CHANNELL had before him in the case of Heaver's Executors *v.* Mayor, etc., of Fulham this week the old vexed question of "drain" or "sewer." Two houses had been built by the same owner, and the drain of one of them carried away the water from the sink of the other. It was contended that this junction made the drain a "sewer." The Judge, however, found that this system of drainage had been duly carried out with the sanction of the local authority under section 76 of the Metropolis Management Act, 1855, and therefore that the drain remained a drain by virtue of section 250 of that Act, being "a drain for draining any group or block of houses by a combined operation under the order of a vestry or district board." Other points were raised in the case which might seem in conflict with former decisions—for instance, it was suggested that the sinks might have been connected subsequent to the time the houses were erected and without authority; but the Judge intimated that since the houses remained vested in the family of the deceased the owners could have no higher rights than he had, and this would distinguish the case from Kershaw *v.* Taylor, commented upon in our issue of June 27, 1903. Again, a question was raised as to whether rain water was not led into the drain also from the other house, which might have made it a sewer (as in the case of Silles *v.* Fulham Borough Council, commented upon by us April 25, 1903), but, although the Judge discussed this question, he refrained from giving any express decision. We trust these questions will all be simplified in the promised Bill on the subject of the Public Health Acts.

Flats.

FROM the recent report of the Middle-Class Dwellings Company and other sources of information, it appears clear that there is a "slump" in flats. We may, therefore, expect to see a temporary cessation of the building of this particular form of habitation; indeed it is very likely that the small house will again be returned to by the builder. Flats, unquestionably, have many useful points, but they are not as a rule suitable for families. Hence the moment that the bachelor, the spinster, and the single couple found that the supply of flats was becoming abundant rents began to fall. Builders, in fact, forgot that flats are only a limited market, and the preposterously high rents have also caused economically-minded persons to rent or purchase small houses, which, if they have not fallen, have not risen in annual cost. In other words, the individual house owner has been able within the last twelve months to compete successfully with the proprietors of flats. These proprietors are often limited companies, and, therefore, we may expect to see a considerable reduction in the rent of flats during the next year or two. For rent must go down to obtain tenants, otherwise no dividends will be payable.

The Coal Smoke Abatement Society.

THE Coal Smoke Abatement Society, as reported on another page, held its annual meeting on the 22nd inst. at Stafford House. Sir William Richmond was in the chair, and moved the adoption of the report. Sir Thomas Barlow spoke strongly on the injurious effect of the smoky atmosphere not only on our bodies, but on all our surroundings. A vast sum of money is being spent annually by Londoners in cleaning and painting their houses; one of the speakers said he had made a rough calculation, and it amounted to certainly not less than 2,500,000*l*., probably more. The Society has already done good work, and has the sympathy of the London County Council, the Office of Works, and the City Corporation, but it is sadly hampered by want of funds. Sir William Richmond made an appeal to the large audience, begging them to enrol themselves as members or get others to do so if they already belonged to the Society. The subscription is only 5s., though donations of larger sums are much needed.

Victorian Institute of Architects.

WE noticed in our last issue the newly-issued *Journal* of the Institute of Architects of New South Wales, and the article in it on the architecture of Sydney. The January number of the Journal of Proceedings of the Victorian Institute of Architects contains a paper on "The Streets of Melbourne from an Architectural Point of View," read by Mr. W. M. Campbell, Associate, before a meeting of the Institute in October last year. The author sketches concisely the history of the city, the character of the site when selected, and the reasons for its selection, and makes some good suggestions in regard to the most effective way of treating city architecture. We quote the following in regard to the general principle on which Melbourne was originally laid out:—

"Some two years after the landing of the first settlers in August, 1835, the place had grown to such importance as to necessitate its being properly surveyed, and laid out on some definite plan. This was done by the Government surveyors, Messrs. Hoddle and Russell, at the instance of Sir Richard Bourke, Governor of N.S.W., who himself visited the young settlement. The area included in this plan was inclosed by Spencer-street and Spring-street, Flinders-street and Lonsdale-street, and was virtually the plan we now have of that block. It consisted of a rectangle, divided by its intersecting streets into rectangular blocks. A fine breadth of 99 ft. was given to the main streets, but want of foresight was shown in reducing the width of the secondary streets. These latter were originally intended as back entrances to the yards and gardens facing the main streets—a purpose which they have long ceased to serve. The plan adopted has the advantages of rectangular building blocks, simplicity and economy of space, but gives a monotonous and uninteresting appearance to the city. There are none of these odd corners and irregular spaces, which suggest to public spirited citizens donations of fountains and statuary. There are no oases of grass and flowers, trees and shade; no seats or restful places, in soothing contrast to the bustle of the city. Everything is mathematically true and square. The perspective lines of the streets run away into indefinite distances without break or satisfactory ending. The general trend of expert opinion on city planning is now against this gridiron plan, as it is sometimes called. Points of interest, open areas, diagonal and curving roads, are considered desirable in the city plan. Washington, planned like a wheel, Paris a constellation of stars, Vienna a central block containing most of the principal buildings, encircled by park-like boulevards, are the types which have had most influence on recent city building in the old world."

"The Light of the World."

AT the Fine Art Society's Gallery is to be seen Mr. Holman Hunt's replica, life-size, of his celebrated picture "The Light of the World." The causes which are said to have led to the repainting of the subject are sadly indicative of the narrow sympathies of English people, and religious people more especially, in regard to art. The original picture was presented to Keble College, the authorities of which do not seem to have recognised its value as a work of art unique of its kind, and allowed it to hang in the library near a hot flue, by which the picture was practically ruined. There appears to have been

something about its symbolism also displeasing to their theological views, as it was afterwards hung in an out-of-the-way position in Keble Chapel; though we observe that the Warden of Keble, in a letter in Thursday's *Times*, denies the impeachment. We have always been of opinion that the public enthusiasm about this picture was as much religious as artistic; but nevertheless it was a remarkable and memorable work, and it is much to be regretted that it should have fallen into the hands of people who could not understand its value or take proper care of it. The new version, besides the altered scale, differs in several points from the original, and unhappily in a manner that is not an improvement. The expression of the head is different and much less pathetic, and in the original there was a strange mystery of colour about the garment which seems to have escaped in the new version. It was very good of the artist to try to revive it, but if he had endeavoured to produce an absolute replica the same size as the original we should probably have been nearer to getting back what Keble College has destroyed. The picture was exhibited in a room to itself at the Fine Art Society, people sitting solemnly in a row before it as if they were in church, which appears to be the orthodox method of receiving one of Mr. Hunt's pictures on religious subjects.

The Institute of Water Colours.

THE present Exhibition of the Institute of Painters in Water-Colours is a curious combination of some really beautiful works, which we look at for their own sake; others of which the subject seems interesting, and one turns up the catalogue to see what it is about; and others (a good many) which are interesting in neither sense. The best landscape in the collection is Mr. Weedon's "Fittleworth Common" (6); all his exhibits are examples of true and unpretentious landscape painting. There are other—much larger—works, such as Mr. Bernard Evans's "Fountains Abbey" (75) and Mr. Severn's "Sun Effect near Kilkee" (129), which are what we call scenic effects, powerful as such, but not nature. Among other landscapes to be noted are Mr. F. G. Cotman's "The Last Load" (49); Mr. Reginald Jones's "The Mill on the Avon" (43), very good in the colour effect of the old buildings; Mr. Haité's sketch of "A Shady Lane" (182); Mr. Rainey's "A Woodland Scene" (200), Mr. John Reid's bright bit of sea in "Fishing with Grandfather" (324); Mr. David Green's "After the Storm" (371), an admirable beach scene, everything balanced and in unity; and Mr. John White's "Sea-weeders" (380). Among figure pictures is a life-size one by Mr. Lee Hankey, "Nothing to Sell" (305), which is the kind of art we abhor—a cheap sentiment picture of a starving man seated on a bench somewhere in London; disagreeable in colour and commonplace in idea, and with an apparent secondary meaning in its title which is not a nice one. There is no figure picture of the first order of interest; but there are clever pieces of humour, such as Mr. Steer's conception of Dick Swiveller and the Marchioness (210), poor in colour, but an excellent realisation of Dick; Mr. Frank Dadd's young soldier, "When I First put this Uniform On" (243); and Mr. Clifford's "One of Nelson's Men," a wounded middy parading the Thames side at Chiswick with his mother; both figures and landscape interesting. Mr. Gotch's half-length under the title "Amber and Black" (271) is a good piece of colour, which cannot be said of Mr. Sainton's "A Golden Harmony" (332), though the face of the figure floating in this yellow atmosphere is beautifully painted; so also is the nude body of the same artist's "Dryad" (376), an undressed figure (not a nymph) seated by a brook; a capital bit of painting, but the head is surely rather too large. A kindred subject, very prettily designed and good in colour, is Mr. G. H. Edwards's "The Message." Mr. Dudley Hardy has a very interesting subject in "In Time of War" (288), the margin of an English harbour with one of those towering, gilded, high-masted line-of-battle ships of the old glorious days waiting for the last of her crew; a work of which one may quote the old critical formula that "the picture would have been better if the painter had taken more pains."

The Woodbury Gallery.

SOME pictures, drawings, and studies by the late gifted brothers Henry Moore and Albert Moore are on view at the Woodbury Gallery in New Bond-street. The most interesting things in the Albert Moore collection are some of the small studies for figures and drapery, Nos. 18, 20, 21, and 23 especially. But the works by Henry Moore are the most valuable portion of the exhibition. The versatility of the artist, who was known to most people only as a sea-painter, is shown by some inland landscapes and a painting of flowers which reminds one rather of M. Fantin-Latour. But the studies of sea make the strong point of the exhibition. "In the Portland Race" (40), an almost rough sketch, is a splendid record of the impression of these "still-vexed" waters; "The Jersey Packet off Sark" (45), dimly descried in the distance across a waste of dark water, is equally fine. Moore always put the shipping at a distance in his sea pieces, because for some reason he would not take the trouble to study ships properly, and never felt at home with them. Other excellent pictures in this part of the collection are "Early Morning off Penzance" (46), "Off the Hampshire Coast" (60), and "A Sunny Afternoon" (64). But the two studies of rough sea surpass everything else, and are alone worth a visit.

CARPENTERS' HALL LECTURES:

CANTERBURY CATHEDRAL.

THE fifth of the present course of free lectures on matters connected with building was delivered in the Hall of Carpenters' Company, London Wall, on Thursday evening last week. The Dean of Canterbury presided, and in introducing the lecturer, Professor R. Elsey Smith, he said that the lecture on "Canterbury Cathedral" was partly prepared for delivery in that Hall by the late Professor Roger Smith, whose son, just a year after Professor Smith's lamented death, would read the lecture prepared for delivery a year ago.

Professor Elsey Smith then read an interesting paper on the cathedral, illustrated by a large number of lantern views. He said that the cathedral has sufficient peculiarities of plan and structure to make it a very interesting object to the student of architecture. Both the historical and the architectural side of Canterbury had been studied and analysed by two of the finest intellects of the last century. Dean Stanley's "Memorials" and Professor Willis's "Architectural History of Canterbury Abbey" formed, between them, a mine of valuable matter. Canterbury was marked by the peculiar form of Norman architecture which part of the building displayed—that part which dates from soon after the Conquest—and also by the French peculiarity of plan—a chevet or eastern apse surrounded by small chapels. Further, its treatment, by which he meant its columns, windows, carving, etc., of a rather later date, was essentially French, and not English—this was due to a French architect having been employed. Lastly, there was an entirely original and unusual development of plan at the east end. There were four points to be noticed:—(1) Exceptional Early Norman work, (2) the French plan of the east end, (3) French treatment, and (4) a quite exceptional choir. Having sketched the history of the cathedral from its foundation to the murder of Thomas à Becket, the lecturer referred to the destruction by fire of Conrad's glorious choir in 1174—four years after the Archbishop's assassination, and to the calling in of a Norman architect. William of Sens found his clients convinced that the damage done by the fire was not irreparable; that columns, though cracked and split, could perhaps be made to do again; and that the same thing was true of the walls. Like a judicious architect he set himself to acquire the confidence of his clients, and this was partly done by the energetic and business-like way in which he arranged to import stone and other heavy materials by water. He made very careful surveys of the ruins, and later on suggested that the columns rent by the fire and all that they supported must be destroyed if the monks wished to have a safe building, and at length they agreed. The new columns were carried up 12 ft. higher than the old ones had been, and thus, necessarily, the whole building, east of the transept, was made far loftier in its proportions than before. The plan of the choir as it is at the present day was, no doubt, settled by William of Sens. It presents the peculiarity that the lines of the columns separating the nave from the aisles were sloped inwards for two bays starting at the ninth column, and there was added eastwards a beautiful and comparatively narrow centre, which is known as Trinity Chapel, and has double columns and other refinements, with a wide aisle running round it. This was intended to receive Becket's shrine. The slope was made to fit in tolerably well between the side walls of St. Andrew's and St. Anselm's towers, but it produced a singular and not altogether pleasing effect both inside and out. Lastly, a charming circular chapel, known as the Corona, was erected last of everything. After William of Sens' accident and his return to France, the English William completed what William of Sens had designed and begun, and the differences between the work of the two were not great. English William, however, showed, if possible, a more refined taste, and the carving of the capitals of his columns was of the most beautiful description. In 1378 Prior Chillenden pulled down the nave and transepts and west front and rebuilt them in the Early Perpendicular style. This work appeared to have been completed about the year 1410, and in design it in many respects resembled the contemporary work which was being carried on in the nave of Gloucester Cathedral at the time. About eighty or eighty-five years later the magnificent central tower was carried up by Prior Goldstone. Prior Chillenden in rebuilding the west front had left part of a Norman tower standing; in 1835 this was taken down and the present north-west tower erected. Another work was the construction of a heavy, exceedingly ugly top to the Corona, which it would be a charity to remove.

The lecturer gave a technical description of the building, and in conclusion he said:—"Nothing can well be more dignified or peaceful than the present aspect of Canterbury Cathedral. It is shut in from the rush and hustle of the outside world by the magnificent and extensive grassy close which surrounds it. Here and there we see a large and dignified canon's house, and here and there a grand tuft of venerable trees. All this seems to offer a striking contrast to the disturbed and distracted story we have gone through. Sacked in the XIth century, burnt just after the Conquest, no sooner rebuilt

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than the presbytery is pulled down to make room for a larger; the scene of, perhaps, the foulest murder in English history, and unquestionably the most debasing penance that any English king ever underwent; once more destroyed by a disastrous fire; then, for about three centuries, the most popular resort of pilgrimage in Europe—with its great days, when, it is said, 100,000 visitors would assemble, making it like a Crystal Palace on Whit Monday—its princely worshippers; then the crash, when in 1538 the Lord Cromwell destroyed all the splendid fittings of the interior—an interior, remember, probably as bright with gold, and jewels, and shrines, and colour as the most elaborately-finished cathedral that you could find at the present day in France or Germany."

On the motion of the Chairman a vote of thanks was accorded to the lecturer for his address. The Rev. Dean said that from the year 600 the cathedral had been growing to its present perfection, and they would not be surprised to hear that works were requisite upon it to retain it in its present beauty. The Bell Harry tower now requires a great deal of reparation and to that end it had been very carefully examined by the cathedral architect. He was delighted to say that in its substantial structure the tower was safe. There was no danger of any such collapse as there was at the central tower of Chichester some time ago; still, the tower had been seriously damaged by the weather. The Ecclesiastical Commissioners had spent a thousand pounds in order thoroughly to examine the tower, and, when they knew the extent of the damage and had formed an opinion of what they ought to do, no doubt they would have to appeal to the British public to contribute several thousand pounds towards the maintenance of this great relic of English architecture and Christianity.

On the motion of Mr. Percy Preston a vote of thanks was accorded to the Chairman for presiding, and the meeting then terminated.

THE COAL SMOKE ABATEMENT SOCIETY.

THE annual general meeting of the members and friends of this Society was held on Tuesday, by permission of the Duke of Sutherland, K.G., at Stafford House, St. James's, Sir William Richmond, K.C.B., R.A., presiding.

The Chairman, in proposing the adoption of the report, said the Society, although small, was a very active one. It did a great deal of work, but they had not sufficient money to do all they would like. If they had more funds they could do double the work they at present accomplished; but still the amount of work done in the past year was very considerable. From January 1 to December 31 the Society's inspector reported 2,000 observations of smoke pollution, which led to the detection of 1,460 cases of nuisance, and upon those observations 1,278 complaints were forwarded to the various metropolitan local authorities. Following those complaints forty summonses were issued under the Acts, involving the offending firms in penalties and costs to the amount of 104*l.* 15s. In testimony of the effect of the Society's steady and persistent method of procuring the enforcement of the law, the Committee had been able to draw up a list of sixty-eight firms who, before the Society exerted and made itself felt, habitually polluted the atmosphere of our city with one or more chimneys, and whose works within the past six months had not been observed to emit any smoke at all. When they thought that all that work had been done with only one inspector he thought they would agree with him that it was a great achievement. Before their Society was founded none of the London boroughs paid any attention at all to the clause in the Public Health Act relating to the pollution of the atmosphere by smoke. The L.C.C. took no action in the matter, and the borough councils obstinately refused to obey the law. When they started the Society they determined to proceed in the simplest way, and, instead of trying to frame a new law, to try and get the existing law put into operation. They were now in co-operation with almost all the borough councils in London and with the L.C.C., and that body was now meditating a most desirable scheme, which was to fine offenders 10*l.* for the first offence, the fine to be doubled on a recurrence of the nuisance. That had been done at the instance of their Society. The City of Westminster was in harmony with the desires of the Society, and he was pleased to find that they were able to prosecute clubs for emitting black smoke. The manufacturers said that it was the domestic smoke that caused the nuisance, but that was not true; for, if they were to take away the factory smoke from London and its environments, they would abate half, if not more, of the smoke of London. Therefore the Society was going to continue its efforts in forcing the various county councils and borough councils to adopt the Act and enforce it with rigour. West Ham was a very great factor in the smoke nuisance question; the sanitary authorities of that place had been very remiss in the performance of their duties, and although they had received from the Society 572 observations, the borough councils had refused to act, so they were now taking the matter into stronger hands, and had appealed to the Local Government Board to perform the duties which the borough councils ought to do. With regard to domestic grates, there was no doubt that they could get rid of the smoke from that source if they chose, but the Society would rather press the question of the manufacturer first.

Dr. H. A. Des Voeux, the Hon. Treasurer, in seconding the motion, said he hoped friends would notice that the Society spent last year 47*l.* more than it received. He was inclined to think that much might be done with the domestic grate. There were 600,000 kitchen chimneys belching forth smoke in London every day, and he thought all ought to do what they could to diminish the smoke from that source.

The report was adopted.

Sir Thomas Barlow, proposed the following resolution:—"That the pollution of the air by coal smoke is injurious to public health and vitality, destructive to works of art and vegetation, and directly demoralising to the inhabitants of a great city." He said that it was always best to avoid exaggeration, and, although it was true that human life in this country was undoubtedly lengthening, there could be no doubt that in respect to London-born people there was a considerable deterioration in many different ways and due to many different causes. One factor that they were apt to forget was the influence of sunshine in promoting health; and the great hindrance to sunshine in this country, and particularly in London, was the amount of mineral particles in the atmosphere. When they talked about fogs, people generally thought about November fogs, but as a matter of fact we always had more or less fog in this country due to smoke contamination. The result was a lowered standard of health and vigour which was most manifested amongst growing people. We were only on the threshold of understanding the importance of sunlight as a factor in health, and architects and builders could do a great deal of good by giving increased window space. They could also do good by limiting the erection of those enormous flats which really converted some of the West-end streets into wells. But the most crying necessity was to reduce the amount of carbonaceous elements in the atmosphere. He need say little about the effect of smoke on many of our beautiful buildings—it was obvious to all—and it was nothing short of pitiful that so many of London's beautiful buildings should be ruined by a cause which was preventable.

Mr. W. N. Shaw, M.A., in seconding the resolution, remarked that he believed some people thought that smoke was useful in that it had the power of destroying germs, but that was a great mistake—there was no disinfectant to be compared with the action of sunlight. While people were very careful about what they ate and drank, they were wonderfully apathetic about the air they breathed; we did not even keep ourselves informed of the state of the atmosphere, although records were carefully taken in Paris. He estimated that London spent 2,500,000*l.* a year on dirt, so there was money in trying to prevent it.

Mr. Ebenezer Howard, of the Garden City Association, proposed the following resolution:—"That this meeting, in recognising the practical results already achieved by the Coal Smoke Abatement Society with the limited resources at its disposal, and in approving of its line of action, pledges itself to use its best endeavours to place it in a position to extend its operations." He said that in their first garden city they would adopt several means to try to minimise the smoke nuisance, and they looked for great help in that direction from the fact that they would have all their machinery propelled by electrical energy which would be generated by Mond gas.

Mr. Julian J. Corbett seconded the resolution which was carried.

The President and other honorary officers having been re-elected, the proceedings terminated with votes of thanks to the Chairman for presiding and to the Duke of Sutherland for the use of the room.

THE ARCHITECTURAL ASSOCIATION SPRING VISITS:

V.—BELGRAVE HOSPITAL FOR CHILDREN AND BISHOP'S HOUSE, KENNINGTON, S.E.

THE large attendance of members at the fifth visit of the session on Saturday afternoon, March 19, testified to the success of the current series, in which a useful and varied selection of subjects has been made by the Committee.

The Belgrave Hospital for Children proved to be a source of keen interest and general admiration, both from the nature of its planning and from its architecture. We published a view, together with a plan and brief description of some of the materials used, on May 9, 1903, and we now supplement that account with some information of general interest arising from our inspection. The architect, Mr. H. Percy Adams, has succeeded in producing a truly impressive building, although as yet incomplete, in which a generous massing of the red brick material is the dominant influence in the breadth of the exterior effects. Unlike what is usually found in these institutions, the windows have stone mullions and transomes with metal casements; the recessing of this stonework in the walls and many another subtlety tell what pains and thought have been bestowed on the design. Another factor contributing to the satisfactory results is the steep tiled roofs, while the necessary sanitary excrescencies are well schemed with the general grouping and enhance the dignity of the whole.

This institution was formerly housed in the Grosvenor-road, Pimlico, but it became necessary to extend its work and to acquire new premises in another district, and the building under notice, which was opened early in 1903, now supplies its needs. The site provides frontage to three streets, and, although small in extent, has been utilised to the best advantage. The ultimate form of plan will comprise, broadly speaking, a central administrative block, three wings containing wards, and an out-patients' department. At the present time, however, the south-west wing and the upper part of the south-east wing have not been built. The main entrance on the ground floor is placed on the Clapham-road front facing north-west. To the left on entering are a casualty ward and small isolation room, arranged for the convenient reception and discharge of accident cases, while on the right is the secretary's office, etc. The entrance passage, which is barrel vaulted, finished with an interesting mosaic, leads to the central staircase hall. This is a lofty apartment, lighted at the roof by large dormers, in addition to windows in the walls. Here the feature is the teak staircase, the treads of which are solid timber. A very simple yet pleasing decorative treatment in marble, executed by Messrs. Burke and Co., has been applied to the ground-floor story. The flooring is laid in 12-in. squares of Piastraccia marble, and the walls, to a height of about 7 ft., are covered with the same material, finished with a small moulded capping of Irish green. A neat marble chimney-piece in an arched recess and a commemoration panel treated in excellent scale complete the elaboration of this charming interior.

A door opposite to the main entrance leads to the kitchen and larders occupying the lower story, which is the only part yet built, of the south-east wing. Lifts are provided for the delivery of coals and meals to the upper floors.

A corridor, decorated in a similar manner to the hall, gives access to the surgery and medical staff apartments in the north-east wing and to the out-patients' department, placed between the two last-named blocks. A successful piece of planning has been contrived for the convenient working of out-patients' demands. Entrance is gained from the side road, and immediately on entering cases are diagnosed, and directions given as to subsequent procedure. In the large waiting-hall adjoining notices and signals are displayed indicating the respective medical or surgical consulting rooms, whilst the central door leads to the dispensary, and onwards to the exit facing the back street, thus avoiding congestion about the entrances. In the basement rooms are provided for dealing

with contagious or emergency cases. Although this department is practically one-story high, a few bedrooms are provided on the south side intended for isolation purposes. When built, the ground floor of the south-west wing will chiefly accommodate the matron's apartments.

Above the entrance, on the first floor, is a babies' ward, lighted on three sides by large mullioned windows; tile lining here, as indeed in all the wards, covers the whole of the walls, and a happy idea is introduced in large decorative panels with figure subjects representing nursery rhymes. These are designed by Miss Gertrude Bradley, and executed by Messrs. Simson in 6-in. glazed tiles. Doorways in the two front corners give access to small lavatory and cleaning places, cross ventilated, and disconnected from the ward in the usual way. The first and second floors of the north-east wing consist of children's wards, nurses' room, ward kitchen, linen-room, and disconnected sanitary apartments.

In addition to hot water heating, the wards are also warmed by Shoreland's stoves, occupying the centre of the room; these have specially designed glazed-ware coverings. With reference to the internal finishings, the walls are lined with a glazed tiled dado, and much effort has been made to maintain rounded corners in plaster, wood, and glazed-ware work. The floors are laid with teak blocks. No pains have been spared in making the wards cheerful, and no small detail omitted in the efficient arrangement of cleansing appliances.

In the central part of the second floor is a large operating theatre lighted from a long skylight. The walls and ceiling are lined with tiles throughout, and the floor laid with terrazzo paving. Various operating tables and the necessary appliances were inspected. Some special artificial lighting and water taps devised by Dr. Clinton Dent excited considerable interest. An independent system of electric heating and ventilation upon "plenum" lines is installed in order to produce required temperatures at all seasons of the year; this, together with the general warming plant, is the work of Messrs. Rosser and Russell. The skylight referred to is double glazed to resist external influence upon the temperatures of the interior.

Above this theatre, on the third floor, are nurses' recreation and writing rooms, and over the ward in the north-east wing are the nurses' bedrooms. The topmost story of the central block is given up to servants' bedrooms.

The heating chamber is situated below the main entrance, and contains two 20-ft. Lancashire boilers, fuel stores, etc. In the rear of the site is a small detached building containing mortuary, post-mortem room, and microscopic examination room. Thirty-seven thousand pounds is approximately the cost of the buildings so far as they are now finished.

Space does not permit of detailed reference to the innumerable small matters of vital importance necessary to a hospital building, but it is not too much to say that this institution is thoroughly equipped for its work, and is at the same time an admirable example of modern architecture.

The Honorary Secretary of the Association, Mr. Ambler, proposed a hearty vote of thanks to Mr. Adams, whose presence added materially to the success of the visit, and whose explanations were much appreciated. The kindness of the staff in permitting members to wander over the buildings was also recognised in the enthusiasm which greeted the proposal.

By the permission of the Bishop of Rochester, the party was afterwards allowed to visit the Bishop's house in South-place, Kennington-park-road, a four-story red-brick dwelling built by Mr. R. Norman Shaw some nine years ago. The house is planned to meet the demands put upon it by diocesan work. The entrance, on the north-west front, opens upon a vestibule beyond which, and at a higher level, is a top-lighted inner hall. The latter apartment affords access to the dining-room, drawing-room, and study, which are arranged *en suite* to accommodate large attendances at meetings or receptions. To the left of the entrance is a spacious chapel with organ gallery. The ceiling is in the form of a plaster barrel vault intersected by lunettes, whence the lighting is derived. Oak panelling about 8 ft. high and a deep distempered frieze surround the interior, the proportions of which are very satisfactory. The detail generally is of a simple treatment in the manner for which Mr. Norman Shaw is so well known.

After examining the offices in the basement and the bedrooms on the first floor, under the guidance of the Rev. K. Clarke, chaplain, the members were most hospitably welcomed and entertained to tea by the Bishop. This concluded a thoroughly interesting and enjoyable afternoon's work.

THE ARCHITECTURAL ASSOCIATION DISCUSSION SECTION.

THE subject of "The Advantages and Disadvantages of Practice in the Colonies," was introduced for discussion by Mr. P. L. Waterhouse, M.A,. at the ninth meeting of the Session on the 16th inst.

Mr. Waterhouse, at the outset, disclaimed any intimate knowledge of the conditions of architectural practice in the Colonies, but he had, in the preparation of his paper, communicated with several men "at the front." As a result the experiences of Messrs. Herbert Baker (Cape Colony and the Transvaal), John Begg (Transvaal and India), R. M. Hamilton (West Australia), E. O. Payne (Natal), and S. Clarke (South Australia), were laid before the meeting, with Mr. Waterhouse's comments thereon.

As regards equipment—training—for a colonial career, there was scarcely an accord of opinion in the communications from those over-sea, nor with those in the room. There were, on the one hand, lamentations of cultured training being found next to useless, thrown away, the store of knowledge and artistic capacity consequently rusting; practical energy rather than cultured art being in chief demand in a new country. On the other hand, that a good home-training with its strenuous effort and keen competition was the best possible preparation for successful work in a colony, especially if such training could be undertaken with some knowledge of the conditions prevailing in such colony. Yes; but how many men in their early student days suspect that they are destined for any colony whatever? To go out as a specialist of one kind or another would not do. The highly strung, sensitive, artistic man, would, in all probability, be quite out of place. You required to be your own quantity surveyor, and your own everything else. You had not to be shocked at the sight of a corrugated iron building, but you had to learn to make that unpromising material presentable, and so carry on war against the corrugated curse—the "Shedifice"; and you were not obliged to stoop to the red paint-pot in the absence of a passable local tile. Neither Mr. Waterhouse nor those who joined in the discussion could allow that a good training would ever go against a man, even though his lot were cast in an out-of-the-way part of a colony. The further away from the source of learning the more valuable the knowledge possessed. It was thought that a good all-round provincial training was obviously the best to fit a man for a colonial career; but as was also pointed out, the conditions which obtained in large cities, like Melbourne, Sydney, and others, were not so very dissimilar from those at home. Perspectives were not, however, plentiful, nor was there scope for designing wall-papers, and so on. There were other notes pitched in a minor key; the colonials being evidently fearful of an exodus in force from the Mother Country if a too roseate picture were painted. But clearly a man who might succeed here would not necessarily succeed there, although a "failure" here would fare no better elsewhere. But, it was asked, what counted for success? And what for failure? For the success of some most "successful" architects at home was not precisely the kind to be envied—at least in the architectural sense. Mr. Waterhouse observed—and his views were strongly supported in the discussion—that many of the alleged disadvantages were, in reality, advantages. It was by no means an unmixed advantage to have unlimited resources to draw upon; nor were new countries alone in feeling the pinch of the financial shoe. Besides, what architect ever thought he had enough to spend on his client's building? Judging from much modern architecture it had been well had less been lavished thereon. To be able to adapt and use simple materials suitably and appropriately, was distinctly worthy an architect's best endeavours. Where the standard was low, there should be more chance of rising above it; where there were no old examples for guidance the greater the need for one able to point the way. The old Dutch architecture of the Cape was, however, well worthy of study, while India possessed some of the finest architectural conceptions of the whole world. Joinery and constructive timbering of the very best sort could be seen at Hong Kong and Shanghai, and some of the modern work at Singapore was worthy a big city. In Sydney also—as Mr. Herbert C. Corlette, the special Visitor, reminded the meeting—good work had been and was being done. An example even dated from the late Georgian period, while a vigorous Gothic revival there had produced the Cathedral and University buildings in correct style. Moreover, there were very good openings out there if a man were content to mark time a bit, and not to rely too much upon introductions—at least unless backed by a good student "record" at home first. Mr. Corlette had found corrugated iron used in two layers, with a 12 in. space between them, effectual in preserving an equable temperature, and, of course, especially so if painted white outside. He had recently observed some barrack buildings on Salisbury Plain built of corrugated iron (with thatched roofs) which struck him as showing how that unpromising material could be pleasingly treated. It occurred to Mr. Corlette whether something could not be done in the way of reducing the undoubted disadvantage felt by those in the colonies in respect to their being cut off from their professional brethren at home, and it had occurred to him that it might be possible to arrange a sort of travelling exhibition of students' and other drawings somewhat after the manner of the practice of sending certain of the Institute prize drawings round the provinces, as is done in connection with the Allied Societies. He hoped the Institute of Architects might see its way to enlarge its boundaries in this respect. There were advantages, however, in the possession of which the colonial was quite enviously regarded by most of those who spoke:—The rapid growth of new cities, practically unlimited sites, no boundary disputes, no ancient lights, comparative immunity from trade catalogues and representatives, no building regulations, elephants to ram your concrete, etc., to say nothing of the scope for initiative, independence, resourcefulness, the zest of facing new problems under new conditions with new ideas. Mr. Begg had indeed summed up the discussion in advance by observing "that most men in practice at home seemed to wish they had emigrated, while most men practising in a colony seemed to wish they were doing so at home!"

The discussion had been opened by Mr. K. Gammell, and continued by Messrs. H. Gregory Collins, Herbert Passmore, A. S. Tayler, Louis Ambler, and the Chairman, Mr. J. H. Pearson, who emphasised the indebtedness of the section not only to Mr. Waterhouse, but to those gentlemen under other skies who had so kindly responded to the request for enlightenment on a subject of such wide interest.

THE SURVEYORS' INSTITUTION:

BRITISH TIMBER AND ITS USES.

AN afternoon meeting of the Surveyors' Institution was held on Monday at No. 12, Great George-street, Westminster, Mr. A. Buck, President, in the chair.

The Secretary, Mr. Julian C. Rogers, having read the minutes of last meeting,

Mr. Percivall Currey, Hon. Secretary, read a list of donations to the library, and, on the motion of the Chairman, a vote of thanks was accorded to the donors.

The discussion was then resumed on the paper recently read by Mr. H. J. Elwes, F.R.S., entitled, "British Timber and its Uses."*

Mr. Daniel Watney said they were all obliged to Mr. Elwes for his paper, and also for the photographs and the slabs of timber he had brought there for the members to see. Although Mr. Elwes had been engaged in forestry for so many years, and had travelled to all parts of the globe to see trees growing, yet he (the speaker) did not agree with his conclusions in regard to a timber famine. In most discussions on the subject it was said that we are on the eve of a timber famine, but that he could not understand, bearing in mind that there were unexplored tracts of country in which magnificent timber grew. It seemed to him that the difficulty was want of transport, and that when that difficulty was overcome we should not have the threatened famine. He had been

* See our issue for March 5.

through large forests in Sweden and Norway, and he noticed that much timber was being quickly grown there; nor did he think that the supply of timber was falling short in this country. We were told that we do not manage our woodlands and forest lands on the proper principle, and that they did these things much better on the Continent. He had been in a good many forests on the Continent, and it seemed to him that the great object there was to produce fire-wood as well as timber. What we should call waste here was called fire-wood on the Continent. Mr. Elwes said we had about 14 million acres of waste land in England. There was certainly a large area, but the area available for planting was not so extensive as that. About half that amount would be the maximum available for planting, and there was no doubt that a large portion of this might be planted with advantage to the country, both in the matter of the future supply of timber and the present employment of labour. But where was the money to come from? That was a problem Mr. Elwes might very well give some attention to. As to the underwoods of the country, they were practically unsaleable now: they did not pay for the rates and the woodman's time in keeping the fences in order, and that was all the more reason why all the tellers should be saved. We were told that scientific forestry was required, but he thought that might be overdone. He thought that every owner of an estate and every agent ought to learn the principles of scientific forestry, but if the owner learnt practical forestry he could always educate the woodman and see the work done to his own mind. New plantations were often utterly neglected because the owner had no practical knowledge. As to natural reproduction, in the woodlands of England we did not need to plant—natural reproduction would do all that was necessary. In clay grounds oak came up naturally, as did trees in the beech districts. In the Chiltern Hills, when the big beech trees were taken out the small ones took their place and grew very rapidly. As to planting oak, he believed the best way was to dig the soil about 12 in. deep, and then to sow the acorns broadcast and sow them in. Provided the soil was suitable, that would soon produce a good plantation. After two or three years the edges of the plantation should be planted with holly. All would agree that the first thing to do if they were going to plant scientifically was to clear the rabbits away. He did not agree with what Mr. Elwes said, that anyone who put his money in consols rather than in timber planting would be a richer man. If planting was done with judgment he did not think such an opinion would hold. There was one sore point in all questions of forestry and planting, and that was the question of rent and taxes and estate duties, which pressed very heavily on owners. There could not be any profit out of planting for thirty years, and yet rent, rates, and taxes had to be paid all the time, and something ought to be done to exempt from such taxes for such a period all land planted for timber. It was said that money could be borrowed from some land company, on the authority of the Board of Agriculture, for planting; but he did not like that system at all. In such an event they must plant to the satisfaction of someone else. Turkey oak had been mentioned by Mr. Elwes, but in his experience it was no good for outdoor work, though it was a very good wood for indoor purposes. He did not think spruce was worth growing; larch was worth all the other conifers put together, but it was subject to canker. Japanese larch was said not to be subject to the disease, but we had not had much experience of the tree at present. He got some seed from Yokohama recently at 15s. per pound, and as there were about thirty or forty thousand seeds to the pound he did not think it was expensive. It seemed to him that ash was quite as dear or dearer than oak at the present time. Douglas fir seemed to be a tree of the future; he thought it would supersede larch.

Mr. G. Marshall said that probably one reason why comparatively little timber is planted now was that the landowner generally thought that there would be no return in his lifetime for money spent in planting his unproductive land. Again, the landowner did not care to spend money on planting when the land was heavily rated and subject to death duties, and this was a question which was of national importance and worthy of the attention of the Government. He was glad to think that more men were now receiving sound, practical forestry training than was formerly the case, and that efforts had been made, and were being made, by the Carpenters' Company and others to encourage forestry. Mr. Elwes had referred to the question of local authorities charging timber merchants for extraordinary traffic. In his (the speaker's) opinion, this was very unfair. As to oak, English oak was far better than American for strength and durability, but the landowner planted what he thought would return him the most money in the shortest time. A crop of conifers could be matured in about sixty years, but a crop of oak would take about 100 years. Ash should be planted wherever the soil was suitable, for it was getting very scarce; it was always saleable, even at a comparatively early age. Brown oak was a valuable wood, but it took a long time to grow. One tree not mentioned by Mr. Elwes which was very useful for estate work, was the Spanish or sweet chestnut. It was obtained for about half the price of oak, and it was most useful in repairing oak fences.

Professor Schlich said it was a good thing for forestry that gentlemen like Mr. Elwes were taking up the question; but what we must guard against were hasty conclusions based upon Continental systems. We ought to approach the subject with open minds, and take care that our facts were correct. Above all, in considering the Continental management of forests, we should not forget that the condition of things in relation to these forests were different from the conditions in this country. The whole question turned on a financial point. There was not the slightest doubt that properly-conducted forests could be as good an investment for money as what were called gilt-edged securities.

Mr. Stenning said that during the last thirty years a great change had taken place in regard to the prospects of English timber and underwoods. As to the legislation affecting English timber, first of all there was the vexed question of railway rates, which greatly favoured the foreign producer. Then there were the questions of extraordinary traffic on roads, the Factory Acts, Workmen's Compensation Act, and the Death Duties. Another matter affecting timber production was the increasing cost of labour. Recent legislation had been entirely against the English timber merchants. If we took the general tendency of the present day, there was a feeling among architects, and perhaps surveyors, against the use of English timber and very much in favour of foreign timber, and that was invariably the case in a riverside or seaside town. Then the Government were always encouraging the foreign article as against the English. As to a school of forestry, everything was known that could be taught in any school of forestry as to the production and use of British timber. Yew was practically an imperishable wood, as he knew from experience. Continuity of policy in regard to forestry was a most important matter. Estates often changed hands, and, while one owner would not touch his trees at all, another would cut them down. Oak, with proper management, would pay 7 per cent.

Mr. Cowper Coles said that as to planting trees on the waste lands that had been referred to, people who thought this could be done without difficulty seemed to forget common rights and rights of grazing.

Mr. H. Jonas said that the eucalyptus tree was an evergreen, and its leaves were paler than any other evergreen we had. As an ornamental tree he thought the eucalyptus would be worth cultivating. If yew posts were used with the bark upon them they would last as long as iron.

Mr. Scammell having asked a question as to preserving timber,

Mr. Elwes, in replying to the discussion, said he had written his paper because the members of that Institution had so much influence on the future of British timber. Nothing would result unless they made the Government realise that schools of forestry would be of no avail unless something could be done to compete with the foreigner. There was no other industry which was handicapped by such severe conditions of competition as the British timber industry. First of all we were handicapped by the railways, secondly by taxes, thirdly by the undue preference shown by architects, builders, and in some cases by surveyors, and by the Government, for foreign timber. The Government would not give British timber a chance of showing its true qualities, and British producers had in every way difficulties to contend with that no other country had. In the face of all that it was asked why we did not extend cultivation and employ more labour. Dr. Schlich took a much more sanguine view than he (the speaker) did, yet he thought that a great deal more might be done than had been done in the matter of afforestation. As to railway rates, the gross unfairness of those rates could not be realised except by a timber merchant, or until they tried to collect from various parts of the country various pieces of timber. The most incredible instances had come before him during the last few months, showing the unfairness of these rates, but he believed that when merchants kicked and refused to pay the rates the railway companies generally cut down their charges, especially if a company, in any special case, were told to take the timber as it was not worth the cost of carriage. In most cases it was a matter of an individual against a company. As to the uneven growth of timber, that showed the enormous advantage of growing trees from seeds. By doing so one was able to acquire more knowledge about the trees to select. As to future timber supplies, he believed that a famine was much more imminent than Mr. Watney seemed to think, and he knew that millions of acres of virgin forest had been exhausted in America. As to the question of extraordinary traffic, the judgment recently delivered in the Norfolk case seemed to show ignorance on the part of the judge in regard to the conditions under which this so-called extraordinary traffic arose. In his opinion neither Douglas pine nor Japanese larch would become the trees of the future. He would express a warning against planting Japanese larch on a large scale. Although it did not seem to be susceptible of canker, yet they must not forget that it was now planted from healthy seed. Very often the stock from which our larch was planted was not healthy. Acacia was like sweet chestnut, it ought to be cut early. Yew was not only an almost indestructible wood, but it was a very beautiful wood when properly cut and polished. He hoped that the general question would not be forgotten, and that it would be brought before Parliament or the local authorities. The first requisite in order to get English landowners to increase the area of their plantations was to make them believe that they were being properly and fairly treated.

It was announced that the next meeting will be held on the 18th prox., when Mr. Thomas Blashill will read a paper entitled "London Streets and London Street Traffic."

Country Meeting at Newcastle.

The Council of the Institution have accepted an invitation from the members of the Northumberland and Durham, and the Cumberland and Westmorland Provincial Committees, to hold their next country meeting at Newcastle-on-Tyne, on May 26 and 27. Visits are being organised to the Elswick Works, Parsons' Turbine Works, and various other places of interest in Newcastle, and excursions to the Roman Wall, to Carlisle, Aspatria, Keswick, and other places in the Lake Districts.

MODERNITY IN DECORATION.

UNDER this title Mr. Lewis F. Day gave a lecture on the 23rd inst. to the Incorporated Institute of British Decorators at the Technical College, Bradford. The lecture was mainly in the nature of a protest against the assumption that the "New Art," so-called, was really entitled to represent the modern spirit, and a warning against the folly of cutting modern Art adrift from the past. We make too much, he said, of "modernity," we think too much of being "up to date." Our art is necessarily, and cannot help being, modern; there is no use either in forcing the note of novelty or trying to make it as modern as can be. There are tendencies of the times, he pointed out, such as the lack of sobriety and seriousness, which there is surely no need to affect. He would have artists neither hasten to meet the mood of the moment nor blindly submit to it, least of all endeavour to outrun it. He had a good deal to say as to the rashness of letting go all hold upon tradition, of which decoration can never be independent, owing as it does undoubted allegiance to traditional styles of architecture.

Admitting all danger of dependence upon precedent, and especially of slavishly following historic style and adopting its forms, he argued strongly in favour of studying what has been

done, both for the lessons in technique and treatment to be learnt from it, and for its inspiration. He contested the theory that the study of old work is responsible for blunting the faculty of design. The man who is content to copy was never, he thought, fit to do more; it was not the fault of teaching, but owing to the rarity of the inventive faculty, that originality was a thing so scarce among us. The tendency of trade decorators to work in some accepted "style" he put down not to their study of traditional design but to trade expediency, to the trouble it saved to adopt a ready-made manner; and he twitted the modern artist with his timidity. Why be so afraid of not being modern? Apropos of the study of old work, he gave some useful advice as to the use (the limited use) of sketches and to the abuse of learning. The moral of what he had to say on the point of style was, in fact, "eclecticism"—choice; the fusion, perhaps, not the confusion, of types; though he admitted Historic Style to be at the best only an incentive—less a thing to follow than a point of departure.

The extravagances of what is termed the "New Art" he accounted for by modern ignorance of the old, for to know must be to appreciate the best. The restlessness of "up-to-date" design put it, he thought, quite out of the question in serious decoration, of which the first condition was repose. Naturalism, self-assertion, disdain of convention were no new things in Art, though we carried them perhaps in the XXth century to greater excesses than wiser men before us.

Mr. Day insisted, nevertheless, upon the value of originality and upon the right of the artist to be himself; asserting, indeed, that if he had anything in him he would be himself in whatever he did—even in what he (the lecturer) called "translation."

THE LONDON COUNTY COUNCIL.

THE usual weekly meeting of the London County Council was held on Tuesday, in the County Hall, Spring-gardens, S.W., Mr. J. Williams Benn, Chairman, presiding.

Loans.—On the recommendation of the Finance Committee it was agreed to lend Shoreditch Borough Council 480*l.* and 806*l.* for dust-destructor purposes; Battersea Borough Council, 1,235*l.* for pipe sewer reconstruction works; Hackney Borough Council, 8,967*l.* for paving works, and 27,375*l.* for various purposes; Mile End Old Town Guardians, 9,650*l.* for alterations and additions to schools; Wandsworth Borough Council, 9,000*l.* for contributions to street improvements; Westminster City Council, 52,226*l.* for various purposes; and Woolwich Borough Council, 1,076*l.* for purchase of freehold land for an open space and for machinery, and 2,550*l.* for purchase of site for baths, etc. Sanction was also given to the following proposed loans:—Hackney Borough Council, 26,000*l.* for electric lighting, street lighting, and dust destructor; Hampstead Borough Council, 9,477*l.* for paving works; Lambeth Borough Council, 25,083*l.* for paving works; and St. Pancras Borough Council, 19,000*l.* for electric light installation.

The Building Act Committee and the Works Committee.—The various committees were then appointed. The Building Act Committee consists of the following councillors: Messrs. W. Davies, F. Goldsmith, W. Goodman, R. W. Granville-Smith, H. J. Greenwood, T. E. Harvey, Capt. F. Hemphill, H. Jephson, H. A. Harber, John Lewis, John Smith, Hon. A. L. Stanley, H. R. Taylor, R. C. Phillimore, and Edward White.

It was proposed that the Works Committee should consist of the seven following members, all belonging to the Progressive party: Messrs. T. H. W. Idris, L. Sharp, Edward Smith, A. M. Torrance, Henry Ward, D. S. Waterlow, Lord Welby.

Mr. Robinson moved as an amendment that the names of Lieut.-Colonel Rotton and Mr. W. W. Thompson should be substituted for those of Lord Welby and Mr. Waterlow. He protested against the Moderate party being studiously excluded from the Works Committee, and suggested that such action was calculated to lead people outside the Council to the conclusion that there was something in the actions of the Committee which they were desirous should not see the light of day.

Mr. Torrance said he would not consent to any Moderate being a member of the Committee until he saw some sign of repentance on the part of the Moderates, for their attitude towards the Works Committee had hitherto been that of wreckers.

After some discussion the amendment was negatived by 82 votes to 37 on a division.

Application under the London Building Act, 1894.—The Building Act Committee recommended, and it was agreed, that the Council, in the exercise of its powers under sections 13 and 82 of the Act, do consent to the erection of steel and iron sheds on a site on the west side of a way leading from Bromley-road, Catford, to Aitken-road (Messrs. T. George and Son for Messrs. J. Robertson and Sons).

Factory and Workshop Act, 1901, Amendment Bill, 1904.—The Parliamentary Committee reported as follows, the recommendation being agreed to:—

"The Factory and Workshop Act, 1901, Amendment Bill, which has been introduced into Parliament by Mr. Tennant, and is supported by Mr. John Burns, Sir John Dickson-Poynder, and Mr. Peel, proposes to amend in several respects those sections of the Factory and Workshops Act, 1901, which deal with means of escape in case of fire, and also to amend the existing law as regards some other matters. For instance, the limitation which restricts the obligation to provide proper means of escape from fire to factories and workshops where more than forty persons are employed would be removed, and when a factory or workshop is in premises, parts of which are used for such other purposes as offices or warehouses, the local authority would be empowered to require the provision of adequate means of escape from fire in respect of such premises. At present the local authority is unable to take action except with the consent of an objecting occupier of any part of the premises not actually used as a factory or workshop. The Bill further provides for reference to the County Court of any claim made by an occupier of any part of the premises against the owner of the building on account of interference with the part occupied The other alterations in the law which the Bill seeks to effect relate to the production to the local authority (in London, the London County Council) of plans and drawings of any proposed alteration and construction of factories and workshops, the location of lifts and shafts, and the prohibition of unsafe premises. As the Bill deals with matters with which, under the Act of 1901, the Council has experienced difficulties, we invited the views of the Building Act Committee on the proposals in the Bill, and they have expressed their concurrence therewith. Having regard, therefore, to the importance of many of the points raised, and to the fact that fires have occurred recently, resulting in serious loss of life, which, probably, could have been prevented had local authorities been possessed of larger powers of regulation, we feel that the Council would desire to signify in general terms its approval of the Bill. We recommend—That the principle of the Factory and Workshop Act, 1901, Amendment Bill, 1904, be approved."

Appointment.—Mr. E. H. Tabor was appointed resident engineer to supervise the construction of Rotherhithe Tunnel.

Site for Fire Station, Knightsbridge.—The Fire Brigades Committee recommended, and it was agreed that the Council do enter into an agreement to take, subject to the approval of Parliament, a 500 years' lease of a piece of vacant ground, 7,575 sq. ft. in extent, at the junction of Basil-street and Hooper's-court, Knightsbridge, at a ground rent of 790*l.* a year, the Council to have the option of obtaining a reduction of the ground rent to 10*l.* a year at any time within ten years from the beginning of the lease on payment of 20,000*l.*

Drury Lane Theatre.—The Theatres and Music Halls Committee brought up a long report in which they stated that they had formulated suggestions for the improvement of Drury Lane Theatre, but no satisfactory proposals for dealing with them had been submitted. The Committee had since conferred with the representatives of the Theatre Royal, Drury Lane (Ltd.), with regard to the points in dispute, and had thoroughly inspected the theatre, with the result that, except as regards a few minor details, they were not prepared to waive any of their suggestions, and had so informed the company. Indeed they felt it necessary to acquaint the company of certain other matters, not referred to in the original suggestions, which they thought should have attention. In a letter from the company, dated January 25, 1904, it was stated that, failing a satisfactory settlement between the Council and themselves, they would be quite willing for the matter to be settled by an independent arbitrator; and in order, therefore, that that course might be taken, the Committee proposed that the whole of their suggestions should be embodied as requirements in a sealed notice under the 11th Section of the Metropolis Management and Building Acts Amendment Act, 1878. They therefore recommended that a notice under the Metropolis Management and Building Acts Amendment Act, 1878, be prepared by the solicitor, containing 143 requirements. Included in the recommendations are the following:—

"(1) That the existing gallery staircases be reconstructed in accordance with the regulations made by the Council in July, 1901, and that two additional exit staircases, 4 ft. 6 in. wide, be provided from the upper portion of the gallery to the streets.

"(2) That all doors in exit ways or staircases, including those to private boxes, be hung on the exit way or staircase side of the wall, be made to close with the stream of traffic going out and be made self-closing.

"(3) That the gallery and balcony tiers, including the floor of the gallery refreshment-room, be reconstructed in fire-resisting materials; that in the reconstruction, the seating and gangways be arranged in accordance with the regulations made by the Council in July, 1901; and that the staybars and wooden struts obstructing the seats in the gallery be removed, and that the steppings be improved to the satisfaction of the Council.

"(8) That all wood-linings be removed from all parts of the theatre, and where wood construction is exposed by so doing, plaster on metal lathing be substituted.

"(9) That the wooden louvres at the back of the gallery saloon be replaced by metal louvres.

(11) That all recesses and projections in exit ways be defended to the satisfaction of the Council.

"(14) That the doorways leading from the balcony corridors on to the grand staircases be increased in width to 4 ft. 6 in. between the leaves of the doors when open.

"(17) That the seating of the first circle be re-arranged to comply with the regulations made by the Council in July, 1901, and that slopes be substituted for the two steps by the private boxes.

"(18) That the seating in the grand circle be re-arranged in accordance with the regulations made by the Council in July, 1901.

"(21) That the refreshment bars at the end of the stalls, corridors on the p. and o.p. sides be separated by partitions of fire-resisting materials from the passages leading to the stalls exits adjoining, the doors being made self-closing and being hung to close with the main of traffic.

"(23) That when the pass-doors between the pit and the stalls corridor are not being used as exits the openings be filled in with partitions which do not resemble doors.

"(25) That the stalls seating be re-arranged in accordance with the regulations made by the Council in July, 1901.

"(26) That the pit seating be re-arranged in accordance with the regulations made by the Council in July, 1901.

"(27) That the spikes and iron pins be removed from the staybars of the pit entrance barriers.

"(31) That the rooms at the north side of the vestibule used as store for seats be cut off from the vestibule and pit entrance lobby, and from all other parts of the theatre by fire-resisting partitions, ceilings, and doors.

"(33) That central handrails be provided to the flights of the grand staircases not now so fitted, and that the stair rods be replaced by others which do not cause inconvenience.

"(34) That the doorways from the grand saloon to the grand staircases be increased in width to 3 ft. 6 in., the doors to be hung to close with the stream of traffic and to leave no recess, and that the bolts be removed from these doors.

"(35) That the kitchen and store at the north side of the grand saloon be cut off by fire-resisting materials and doors.

"(36) That the box stairs on the prompt side be reconstructed in fire-resisting materials without winders.

"(38) That the decorations around the proscenium opening, including the columns and fronts of the private boxes, be rendered fire-resisting, that the hollow space be filled in with fire-proof materials, and that the woodwork forming part of the old proscenium wall on the auditorium side be removed.

"(39) That the unnecessary woodwork beneath the floor of the orchestra be removed.

"(40) That the staircase from the grand circle to the stage level be reconstructed of fire-resisting material.

"(42) That gas be replaced by electric light throughout the theatre.

"(48) That the use of the tunnel as a dressing-room be discontinued.

"(49) That the openings between the tunnel and the spaces beneath the auditorium and the orchestra be fitted with fire-resisting doors.

"(50) That the use of the rooms in the basement o.p. side be discontinued as dressing-rooms or that they be properly separated from the stores. That the rooms be put into proper repair and the lighting and ventilation improved to the satisfaction of the Council.

"(58) That the floor of passage at the back of the stage be made fire-resisting, and that the doors from the sloping way to Russell-street be fitted with automatic fastenings as a means of exit from this part of the theatre.

"(61) That alternative means of escape be provided from all dressing-rooms.

"(63) That the floor of the property-making workshop be made fire-resisting.

"(64) That the iron doors to goods lift be made to close automatically; that the window to the cupboard looking into the lift be bricked up, and that the lift be completely enclosed.

"(70) That the scene store be properly ventilated to carry off smoke in case of fire and be separated from the workshop above by means of a fire-resisting floor.

"(73) That the opening between the electrical box and stage be fitted with a fire-resisting screen and releasing gear to the satisfaction of the Council.

"(74) That the gear for lowering the fire-resisting screen and turning on the sprinklers be duplicated so that they can be manipulated at or near the stage door as well as from the stage, that some means be adopted to accelerate the descent of the fire-resisting screen, and that stop and drain cocks under seal be fitted to the supply to the sprinkler to allow of periodical inspection.

"(75) That the portion of the stage floor between the fire-resisting screen and the orchestra wall be made fire-resisting so as to complete the separation between the auditorium and the stage at this point.

"(76) That the space between the fire-resisting screen and the proscenium wall be made good in fire-resisting materials at the sides and head.

"(77) That all scenery, wings, sky borders, cloths, draperies, gauze cloths, floral decorations, properties, hangings, curtains, etc., whether on the stage, in the auditorium, or in other parts of the premises, be rendered and maintained non-inflammable.

"(78) That the upper and lower flies and bridges be reconstructed in fire-resisting materials.

"(85) That the auditorium roof, including the wooden ceiling, be removed, and be reconstructed in fire-resisting materials to the satisfaction of the Council.

"(91) That all exit doors from the auditorium and the stage be provided with distinctive lights fitted over them, such lights to illuminate the exit notices, and be maintained throughout the performance.

"(92) That all exit doors be provided with notices clearly painted on them indicating the method of opening them.

"(93) That broad conspicuous lines at shoulder level, with frequent arrows indicating the way out, be painted on the walls in all the corridors and exits leading to the street.

"(94) That an inscription of the following nature be exhibited on the fire-resisting screen—'Safety Curtain'—in sufficiently large letters that it can be read from all parts of the house.

"(95) That a second fire-resisting screen and sprinkler be provided on the auditorium side of the proscenium wall with duplicate releasing gear from the orchestra and stage entrance.

"(96) That all doors leading from the seating or exit ways to other parts of the premises be made to correspond in colour and decoration with the walls in which they occur.

"(97) That all soft woodwork beneath, on, or above the stage be removed, and steel and hardwood construction substituted.

"(101) That the hemp ropes by which the back battens are suspended be replaced by wire ropes.

"(107) That all fire-resisting doors be made self-closing and silent.

"(119) That the fittings generally in the theatre be overhauled, and put into good condition, or renewed, and that in the case of the gallery, the fittings be fixed higher, or others of a different kind be used."

The recommendations were agreed to without discussion, and the Council shortly after adjourned.

THE LONDON ASSOCIATION OF CORRECTORS OF THE PRESS:

JUBILEE DINNER.

THE Jubilee Dinner of the London Association of Correctors of the Press was held in the Grand Hall of the Hotel Cecil on Saturday last week, the Right. Hon. Viscount Goschen, P.C., presiding. The company included Sir W. H. Russell, Sir W. Lee-Warner, Sir J. Jenkins, Sir John Macdonell, Major-General Sir E. H. H. Collen, the Hon. Oliver A. Borthwick, Mr. H. Cust, M.P., Mr. Ian Malcolm, M.P., Colonel G. Earl Church, Major Martin Hume, Professor H. Goudy, Mr. Max Beerbohm, Mr. J. W. Cleland, Professor I. Gollancz, Mr. E. T. Hall, Mr. Sidney Lee, Dr. Garnett, Mr. W. Pett Ridge, Mr. W. L. Courtney, Dr. C. Waldstein, Mr. J. Randall (Chairman of the Association), Mr. S. F. Crampin (Secretary), and others.

The loyal toasts having been honoured,

Mr. J. W. Cleland proposed "The Houses of Parliament," and Mr. Ian Malcolm, M.P., in reply, said that if correctors of the Press wished to make their importance better known they had but to go on strike for twenty-four hours.

Sir W. Lee-Warner then proposed "The Imperial Forces," coupled with the name of Major-General Sir E. Collen, who, in response, said that criticism was like discussion—the essence of progress. We should all welcome judicious criticism, which helped us on to that path of improvement which we all desire to tread.

Mr. W. Teignmouth Shore proposed the toast of "Literature." He said there may have been periods when our literature was greater than it is now and writers greater than those of to-day, but he believed that there had been no period in our brilliant literary history when books were more seriously written, read, discussed, criticised, and corrected than now. We were apt to overlook the great amount of valuable literary criticism we received day by day and month by month in the columns of the newspapers and magazines. Editors knew that there was an increasing demand for sound criticism of good books.

Sir John Macdonell, in reply, said that, if we compared the newspapers published to-day with the works issued in what was called the golden age of literature, we could not help being struck with the prodigious advance in the matter of accuracy, and that was due to a large extent to the correctors of the Press. He had asked himself what was the origin of their art and craft? Perhaps it might be found in some form in the great Benedictine monasteries, in which MSS. were copied, but he suggested that the craft was first organised in the workshops—in the offices of the great printers of the Renaissance. Judging from an interesting letter written by Erasmus, it would appear that Erasmus himself was actually something of a corrector of the Press.

Mr. Pett Ridge also responded, remarking that he wished they could extend the sphere of their operations and even do more for writers by inventing another of those cabalistic signs—the meaning of which he could hardly guess sometimes—a sign, for instance, meaning "Is this really worth printing?" or, "Do people ever behave in this way?"

Viscount Goschen, in proposing the toast of the evening, "The London Association of Correctors of the Press and the Jubilee Pension," said that on that occasion it was natural that their minds should be carried back fifty years and that they should reflect what changes had come to pass since that time. There had been changes in style, in spelling, in humour, and in tone, and none could give a better history of them than the correctors of the Press. Style had changed very much. It flowed more freely—possibly with less dignity and less formality—than in those old days. The numbers of authors who had joined the ranks of writers in the present day, as compared with the past, seemed to be a very interesting feature in the history of literature. Interesting suggestions had been made as to lady writers, and that company knew whether they had increased the labours of the correctors of the Press. He thought it very probable that they had. One of the reasons that he was there that night was that by descent he might say he belonged to the guild of printers. Towards the end of the XVIIIth century and the beginning of the XIXth great efforts were made in typography, and he might say that his grandfather for the sake of typography sacrificed profit. When engaged upon his biography, he (Lord Goschen) came across a story of a most remarkable corrector of the Press—a scholar, almost a poet, and a man of great capacity—and it was through letters from him that he was introduced to the trials, denunciations, and protests which correctors of the Press had to go through. But this corrector of the Press was not prepared to "take it lying down." He argued with the authors, corrected their grammar, and he was always so taken up with the subject he read that he made a great many mistakes, which resulted in his being a very indifferent proof-reader, though he was an excellent scholar. He wrote, "I sometimes sit from seven in the morning till five in the afternoon poring over papers. My own thoughts have hindered me as they seize and hold an idea otherwise than they ought to do. It is quite possible that niggling about words and syllables may often go to the wall where my soul cannot tear itself from some thought or some picture." Was that their experience? Were they carried away as they read by the glory of a work or by the brilliancy of the speaker whose passages they corrected? Or did their minds become mechanical and pass over glories and garbage, scarcely knowing the difference between the two? Then he would like to know the relations existing between authors and proof-readers as regarded spelling. Did they pass things as idiosyncrasies, or correct them as mistakes? How well it would be if the new British Academy would take the matter up, and end the battle between the s's and the z's, and such like. The correctors of the Press on the great daily papers did their work with an accuracy to which everyone who was acquainted with the subject paid a tribute. Very rarely did the readers pass a mistake. He was afraid that no inventor of science would ever lighten their work. Their exhaustive work must lead to many breakdowns, which meant that many good men had to go to the wall. Happy were they who were able to appeal to such an Association as that to render them assistance, with trust funds towards which, he was glad to say, there had been a record subscription that night. Before sitting down Lord Goschen asked the company to drink the health of Sir W. Russell, who exactly fifty years ago opened his career as a war correspondent.

Sir W. Russell replied.

Mr. Crampin, Secretary, also suitably replied. As to omitting to detect errors because they were so absorbed in what they read, correctors were sometimes engaged in very uncongenial work that was certainly not absorbing. For instance, a reader who had poetical instincts might have to correct, week after week, statistics about sewage farms and manure.

Mr. Feldwick proposed the "Visitors," coupled with the names of Professor Goudy, Mr. Max Beerbohm, and Dr. Waldstein, all of whom responded.

The concluding toast was "The Chairman," proposed by Mr. Randall, and suitably honoured.

THE STUDENT'S COLUMN.—Our Student's Column article ("Arches") is unavoidably held over until next week.

ARCHITECTURAL SOCIETIES.

DUNDEE INSTITUTE OF ARCHITECTURE.—On the 15th inst. Mr. P. H. Thoms, the Vice-President of the Institute, read a paper entitled "Some Characteristic Features of Scottish Architecture." He referred to the individuality, the vigour, and the picturesqueness of the Scottish Baronial style, and traced its history and development from the XIIth century till the XVIIth, when it was superseded by the Renaissance Art. He pointed out that the form of its early features was dictated entirely by utility, by the necessity for defence, and that the later features, while retaining early forms, were often adopted more for ornament than for use. A number of lantern slides were shown and described, illustrating various features, such as towers, bartizans, turrets, corbels, machicolations, parapets, gables, fire-places, and ornamental plaster. Some peculiarities of Scottish ecclesiastical architecture were described, and reference was made to the lamentable state of decay into which many of the old castles and churches had been allowed to fall, and the loss sustained by means of wanton demolition and irreverent restoration. The lecturer concluded by impressing upon students the necessity of studying their national style, so that future buildings might retain Scottish feeling and proclaim their nationality.

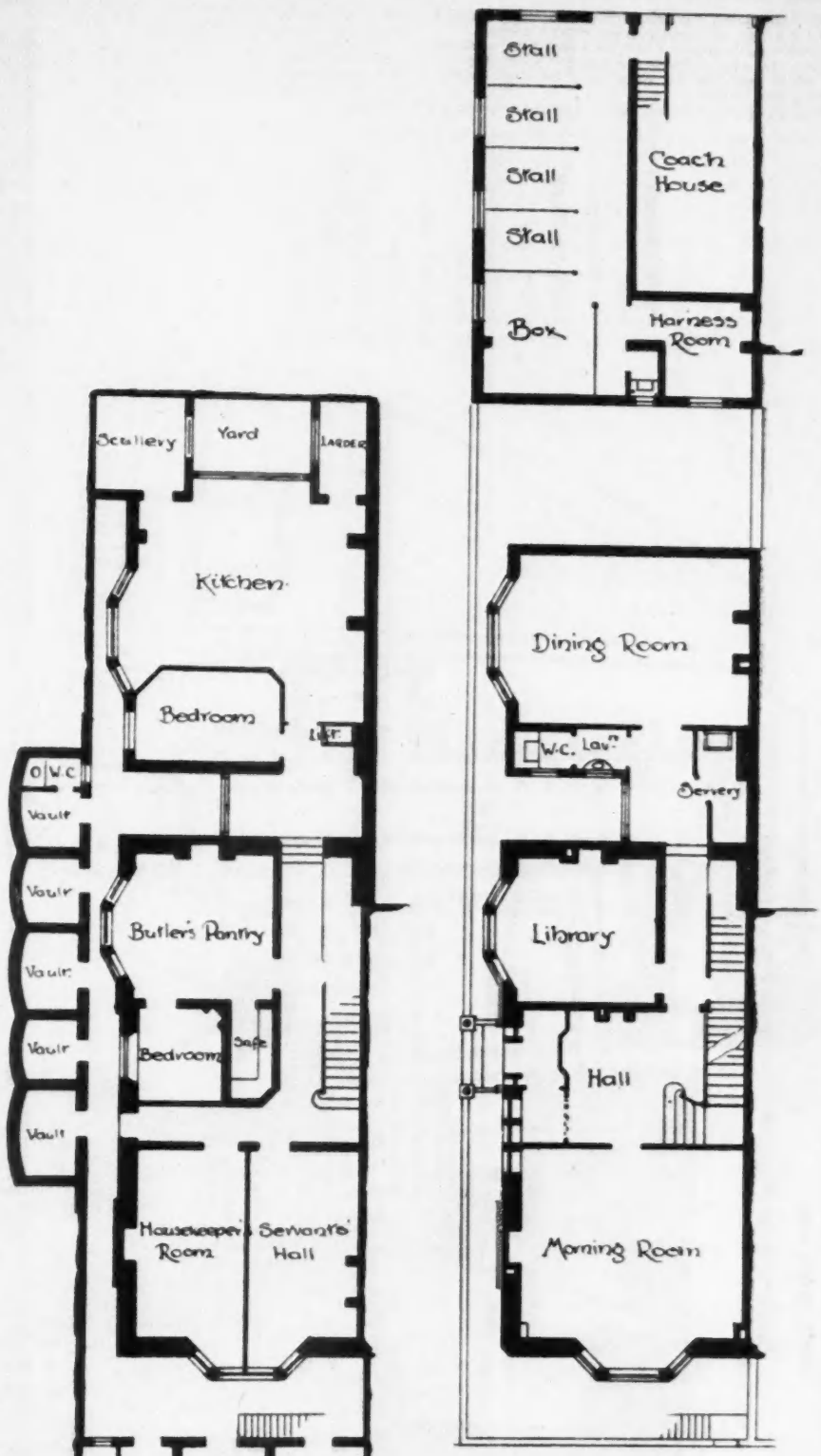
ARCHÆOLOGICAL SOCIETIES.

BRITISH ARCHÆOLOGICAL ASSOCIATION.—The fifth meeting of the session was held at 32, Sackville-street, Piccadilly, on the 16th inst., Dr. W. de Gray Birch in the chair. The Rev. H. J. Dukinfield Astley, Hon. Editorial Secretary, exhibited a photograph of a neolithic fireplace discovered in 1903, at Shawalton, N.B., by Mr. Thos. Downes. Numerous arrow heads, spear heads and celts were included in the find. The fireplace was perfect when discovered, in the shape of a basin, and filled with burnt wood and bones. This discovery is the more interesting from being in the district and neighbourhood made famous by the much debated finds of Messrs. Bruce and Donnelly at Dumbuck and Dumbuic. Mr. Astley also exhibited a large photograph of the six coffins, each containing an almost perfect skeleton, discovered during the recent excavations on the site of the great abbey church at Bury St. Edmunds. One of the skeletons has been identified as that of Abbot Samson, who died in 1211, and has been celebrated by Carlyle in his commentary on the Chronicle of Jocelin of Brakelond in "Past and Present." Some photographs of the ancient Saxon church at Bradford-on-Avon were exhibited; one being of the exterior as it now appears after the removal of all the surrounding cottages. Canon Jones, who first brought it to light, identified it with the very ecclesiola mentioned by William of Malmesbury as having been built by Aldhelm, first Bishop of Sherborne, at the close of the VIIIth century; but recent study of the architectural details as exhibited by the pilaster strips, and the porticus on the north side, have shown that it is later than the time of Aldhelm, probably about A.D. 975. Another photograph was of the interior, showing the east wall of the nave with the little chancel arch, hardly larger than a doorway, and considered to be the smallest in England. A view also of the Bridge Chapel was given. It is hoped that a visit will be paid to Bradford-on-Avon during the forthcoming congress at Bath in August. A paper was read by Mr. Andrew Oliver, dealing with the ancient appearance and condition of "Whitehall and the Thames," and the history of the numerous stately buildings which once lined the ancient thoroughfare of the Strand. The paper, as usual with those contributed by Mr. Oliver, was profusely illustrated by old engravings, maps (including Ralph Aggas's and that of Hoefnagel, 1560) and plans, which enabled his hearers to follow with ease his remarks upon so interesting a subject. A paper was also read by Mr. Patrick, Hon. Sec., contributed by Mr. Chas. Lynam, upon the remarkable Saxon doorway in the west part of the north wall of the ancient church at Laughton-en-le-Morthen, Yorkshire, which was visited by the Association during the congress last year. The present actual doorway and door, with the jambs, segmental head and hoodmould are of modern date; but, above and surrounding this present entrance are the rude architectural features of the ancient Saxon doorway—the semi-circular arch, rebated

on its inner edge, with voussoirs increasing in length as they approach the centre line, the masonry smoothly wrought and joints closely fitted, but with stones irregular in size and their external line also irregular and unshaped. From the inside it is apparent that the original jambs exist and the arch-stones are of considerable size, but a modern lintel has been introduced across the opening, below the spring of the arch. On the outside, spaced at some distance from the jambs, are projecting pilasters which start from two courses of base stones in advance of the pilasters, terminating beneath projecting imposts. The shaft on the west side consists only of two stones, the lower one very long, and the upper one very short; on the east side there are three stones, the lowest one long and the uppermost two very short. The arch springs from the imposts, and its stones are rebated on the inner edge, projecting, on the face, from the wall in continuation of the pilasters below them, their outer surface being sunk back to line with the common face of the wall. This is not an uncommon feature in Saxon work, and may be seen in the pilaster groins at Wittering Church (Northants) and at Heysham Church (Lancs). There is a rudeness of workmanship in the external margin of the doorway, and in the character of the walling also, which contrasts forcibly with the more refined work of the door-arch itself, so that one is inclined to think the outer frame, with its arch and pilasters, is of the earliest Saxon period, and the inner-door arch of a later date. There is a touch of rough Roman feeling about the outer treatment, as though some clever workman, who could neither draw nor design, had struggled to put the thing together from recollections of some Roman work. The paper was well illustrated by charming sketches made on the spot, and by geometrical drawings laid down to scale. An interesting discussion followed, in which Mr. I. C. Gould, Mr. Compton, Mr. Astley, Mr. Baxter, Mr. Patrick, and others took part.

SURREY ARCHÆOLOGICAL SOCIETY. — The annual meeting of this Society was held on the 19th inst., at the Castle Arch, Guildford, Surrey. Viscount Midleton, the President, occupied the chair, and moved the adoption of the report and statement of accounts. The report is chiefly occupied with what the Society has been doing at Waverley Abbey, of which some account was given in our last (p. 314, *ante*). The report goes on: "With these results the Council has now decided to conclude the excavations, as it is advised that further work is likely to be too unprofitable to justify any increase of the heavy debt which the Society has already incurred on account of this important undertaking. The importance of the whole work is shown by the fact that the plan which it has now been possible to draw of the conventual buildings is the most complete of any which has yet been made of a Cistercian house. It is proposed to reproduce this plan in colour, and on the same large scale which has already been adopted for Fountains and other monasteries, in illustration of the full account of Waverley Abbey, which Mr. Harold Brakspear, F.S.A., has kindly consented to write for publication in the annual volume of the *Collections* for 1904." The report was carried unanimously. The retiring members of the Council, viz., Sir F. Pollock, Bart., Lieut.-Col. Marsden, and Messrs. F. A. Crisp, F. B. Eastwood, Edwin Freshfield, P. M. Johnston, W. More-Molyneux, and Ralph Nevill, were re-elected, as also were the auditors, Messrs. C. T. Davis and W. F. Potter, and the hon. secretary, Mr. Montague S. Guiseppi. Viscount Midleton then referred in feeling terms to the death of the Duke of Cambridge, patron and member of the Society, who took great interest in its proceedings, and he concluded by moving that a letter of sympathy and condolence be sent to the family of the late Duke. This was carried unanimously, and the proceedings closed with a vote of thanks to the Chairman for presiding.

WESLEYAN CHURCH, MEXBOROUGH. — On the 18th inst. the foundation and memorial stones of the new Wesleyan Church at Mexborough were laid. The new structure is situated in Bank-street, and will provide seating accommodation for 530 adults. The work is being carried out by Messrs. G. Sprake and Sons, builders, Doncaster, from the plans of Mr. J. S. Wills, architect, Derby. The total cost amounts to 4,722*l*.



House, Sloane-street. Plans.

Illustrations.

SUGGESTION FOR AN IMPERIAL MONUMENTAL HALL AT WESTMINSTER.

THIS grandiose suggestion for an English Walhalla, of which we give two illustrations, arose in the first instance from the exhibition at the Royal Academy, in 1901, of a small drawing by Mr. E. B. Lamb, representing a "design for a National Monument to British Heroes." This fell in, to some extent, with a former idea of Mr. Seddon's for a memorial hall at Westminster, and the two architects have worked out this scheme together.

From the plan it will be seen that the Hall is connected with Westminster Abbey, though the authors have not made the unwise pretence, which has been made by other projectors, that a new mausoleum connected with the Abbey offered an equivalent to "burial in Westminster Abbey." The proposed Hall would stand on its own merits as a place of monuments to eminent Englishmen.

The following are the authors' brief notes in explanation of their scheme:—

"This design is for a structure to contain monuments of high art to eminent men and women of all parts of the British Empire; that such will become a public necessity is certain, and no doubt will be called for before long.

"The site proposed by the authors, in the precincts of the Royal Abbey of Westminster, and of the Houses of Parliament, is fairly free and the only one fit for the purpose.

(*Note.*—This site was proposed for the memorial

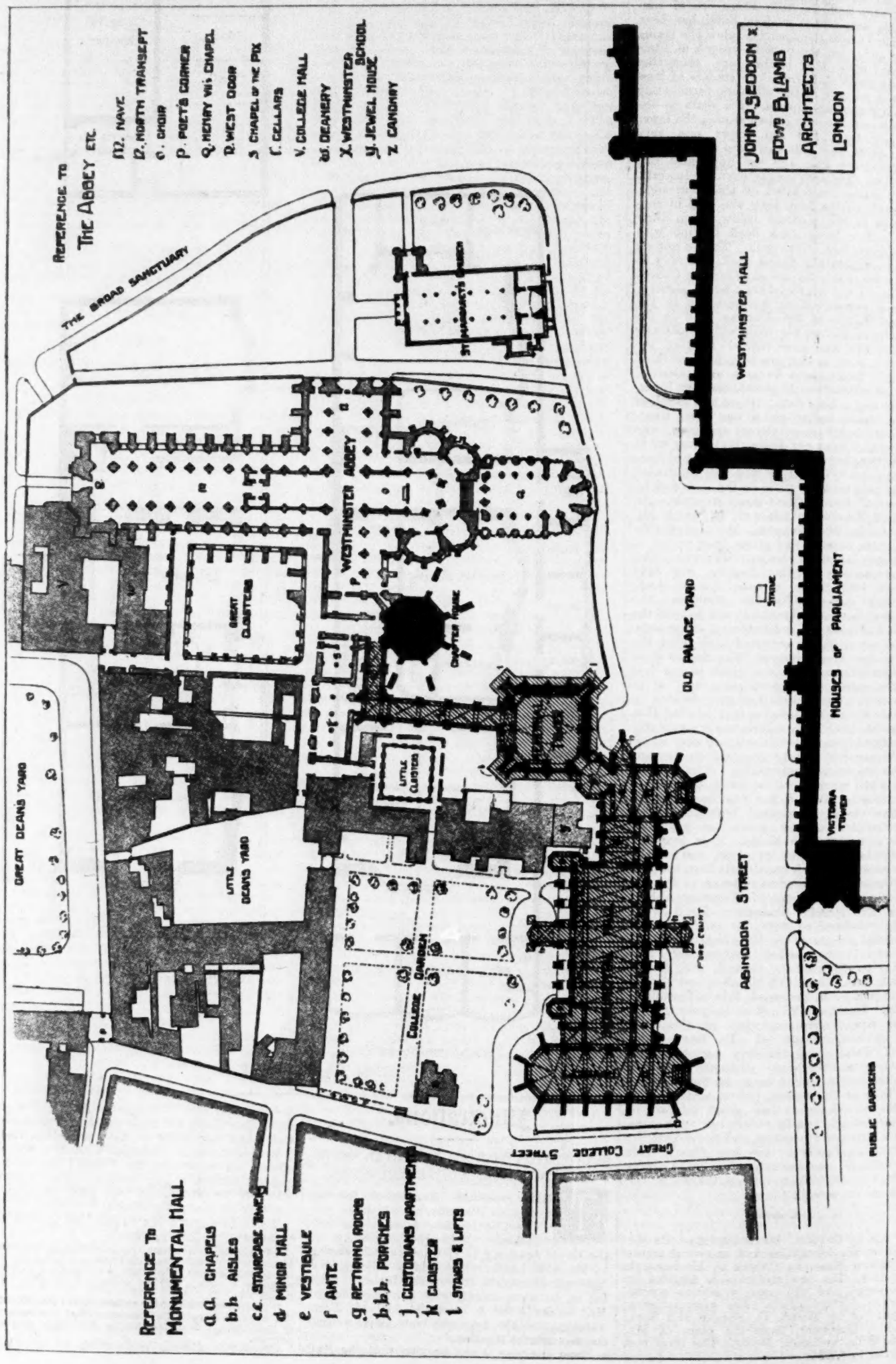
to the late Queen Victoria, but not considered appropriate for that, and rightly so for many reasons.)

"The whole group of buildings would form a worthy centre to the metropolis of the Empire' upon which the sun never sets,' and in historic and religious interest could not be rivalled.

"Grandeur of scale and costly execution would, of course, be essential to the structure; yet the design could obviously be carried out in sections and by degrees.

"The idea, at any rate, the authors hope may lead to some adequate conception of a proper realisation of that 'Imperial thought' which has become dear to the heart of the nation and the Colonies of the British Empire."

The authors must, of course, be prepared at once for the criticism that their tower as proposed would have the result of dwarfing the Victoria Tower and the Houses of Parliament generally; and, indeed, apart from this



Suggestion for an Imperial Memorial

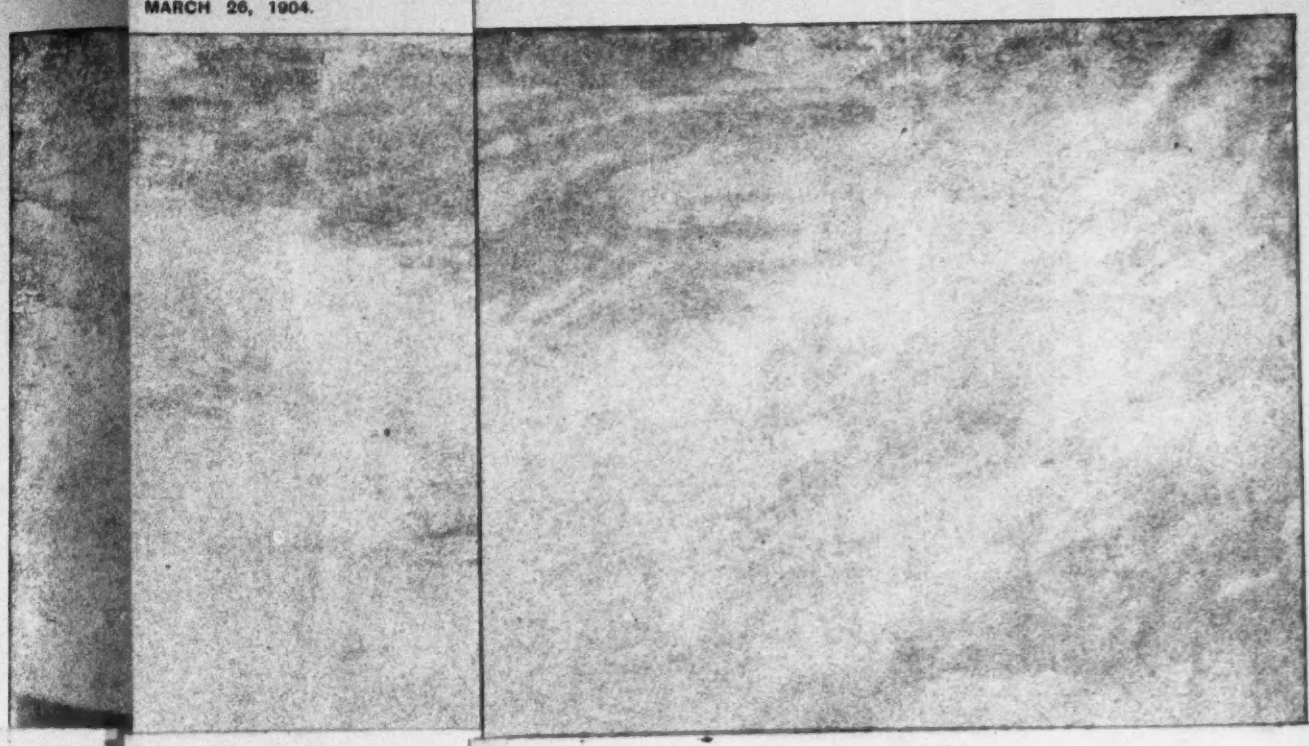
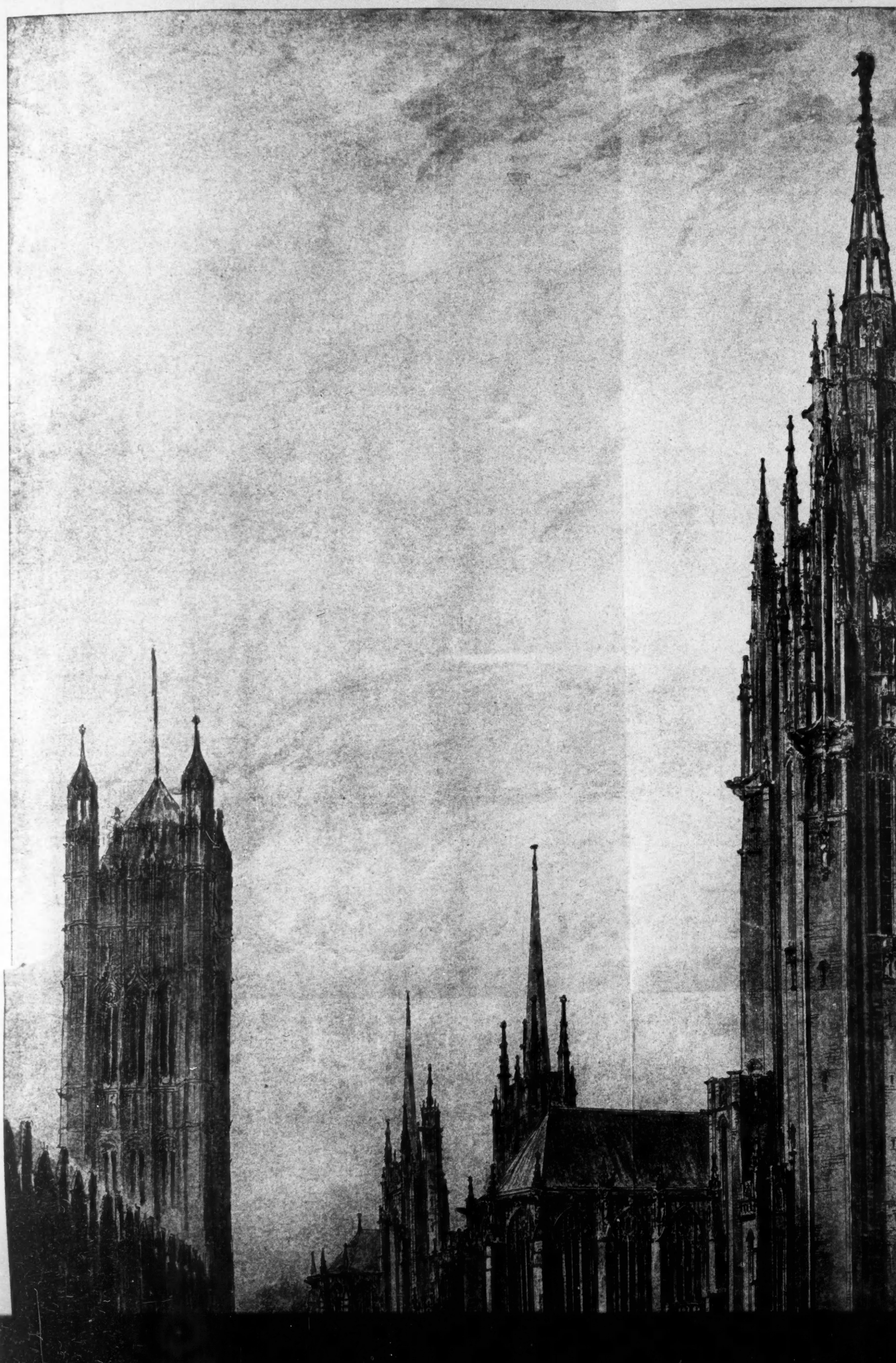
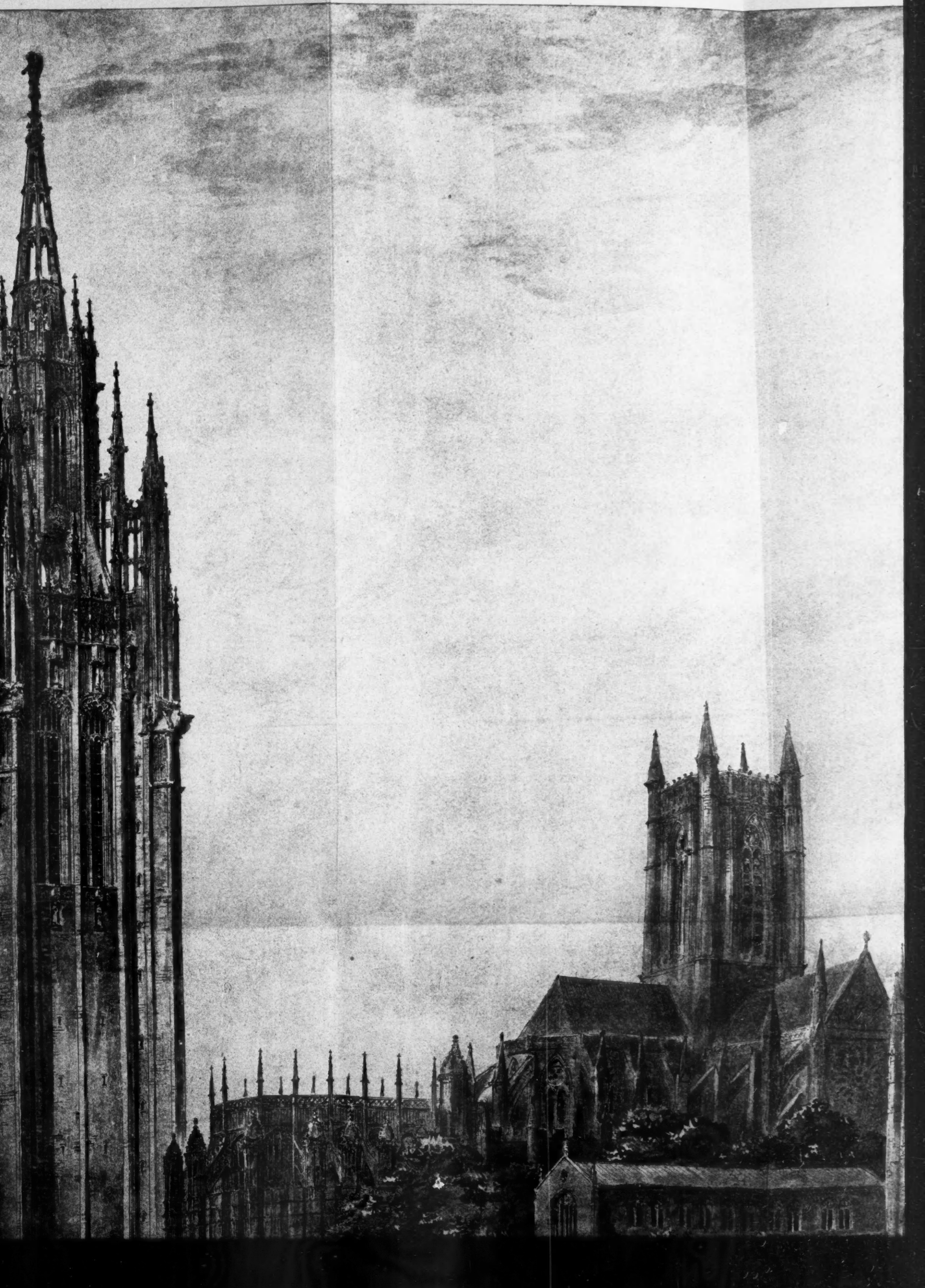
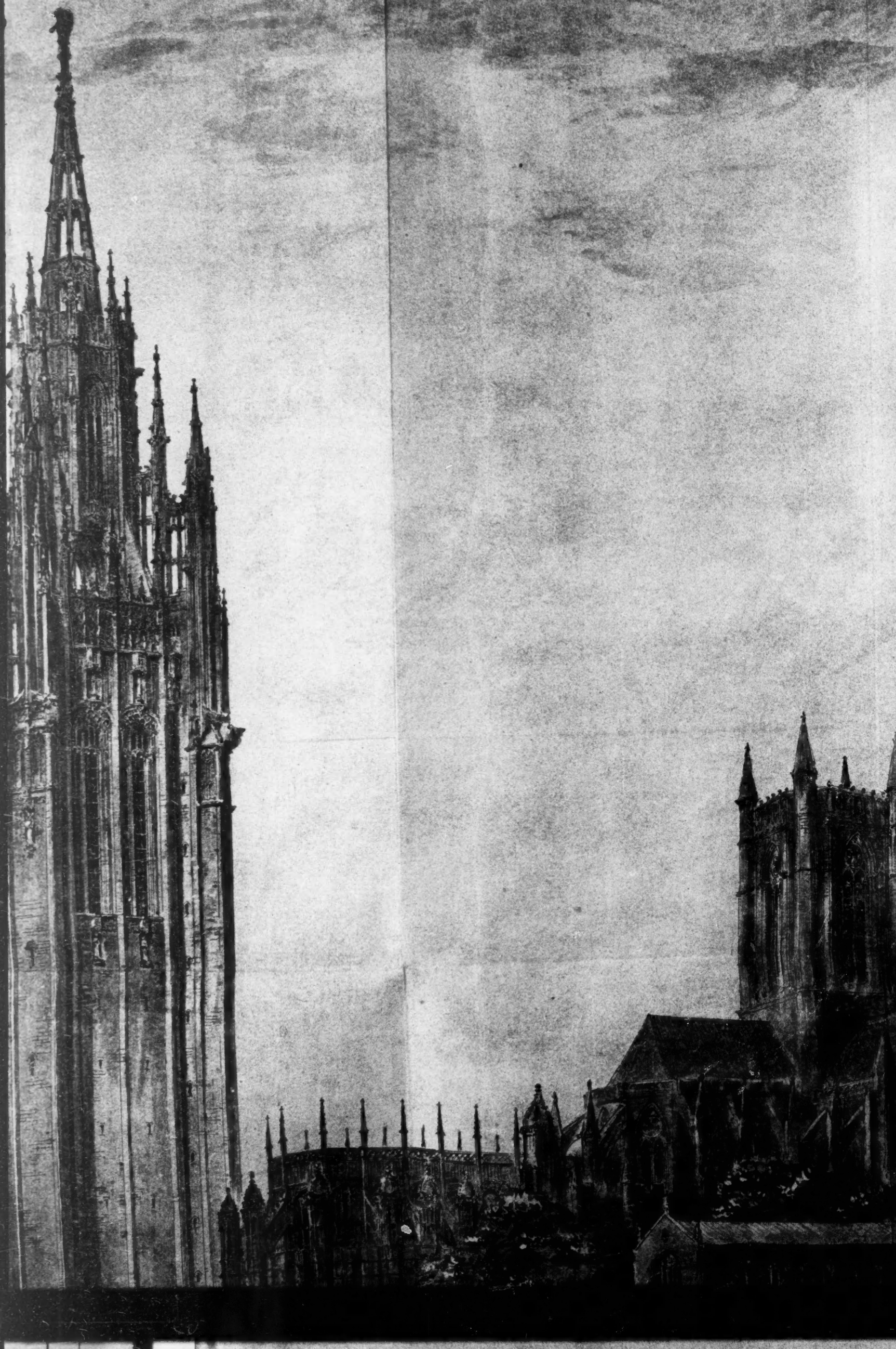
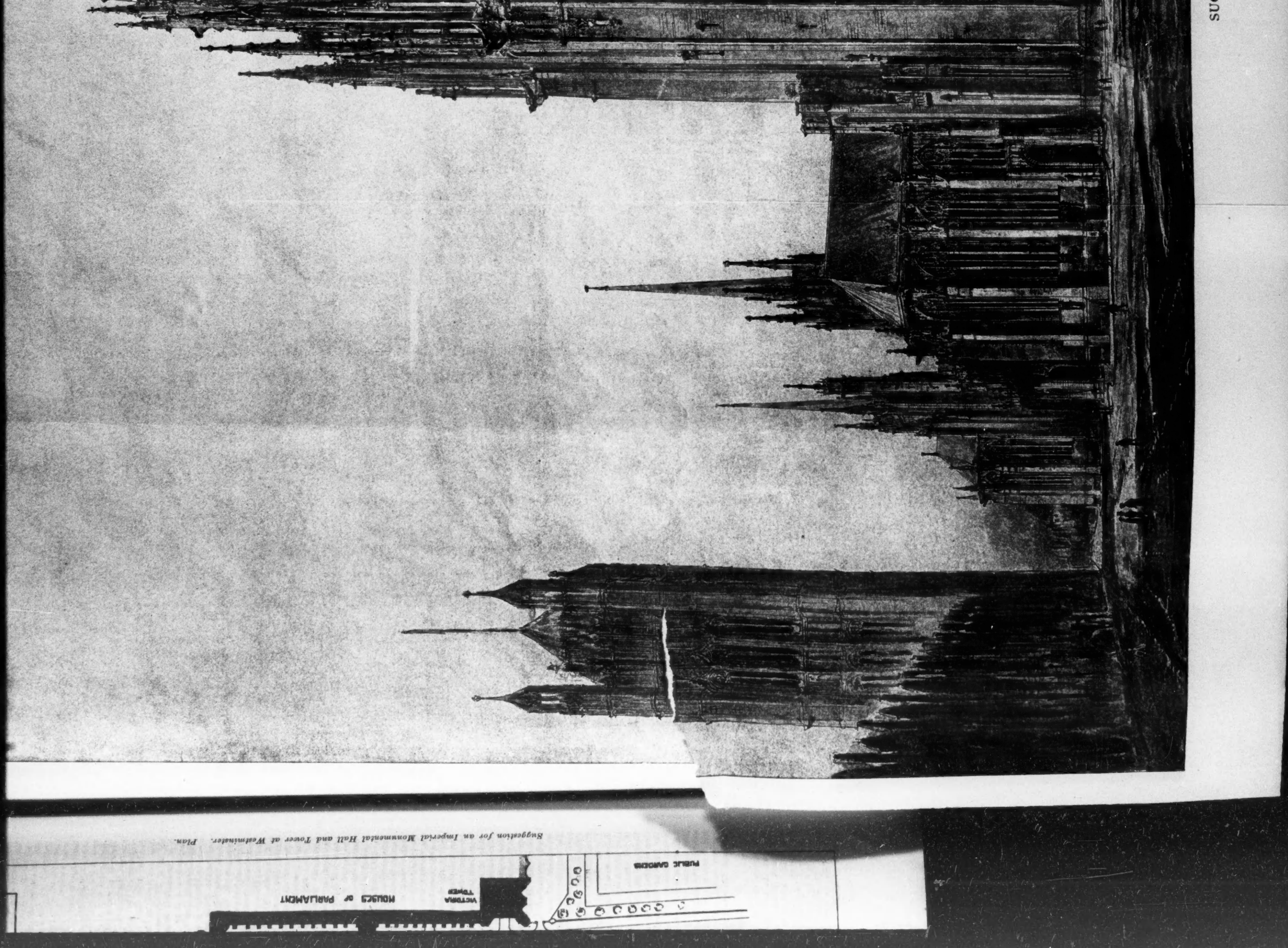


PHOTO LITHO. SPRAGUE & Co LTD 4 & 5, EAST HARDING STREET, FETTER LANE, E.C.

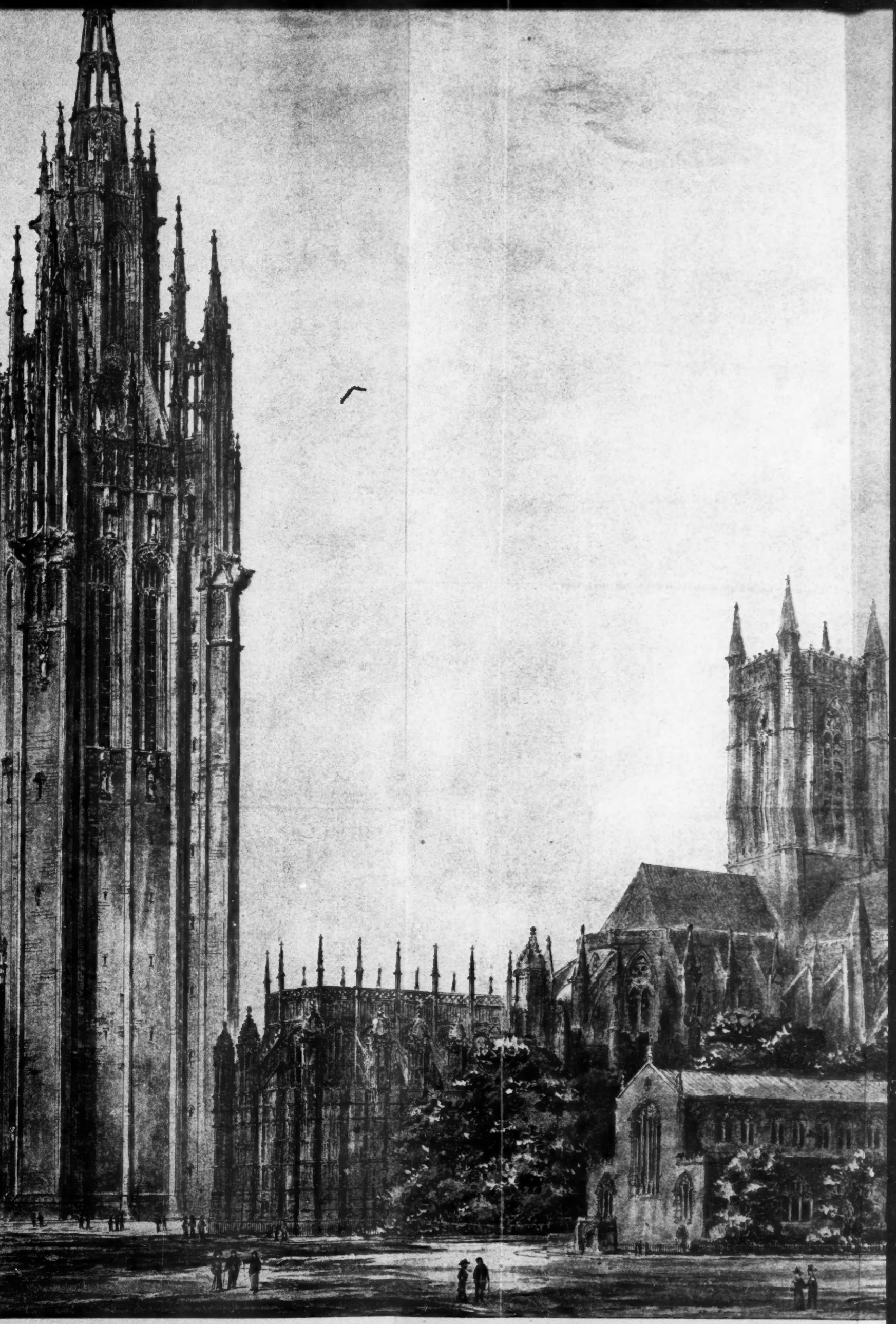






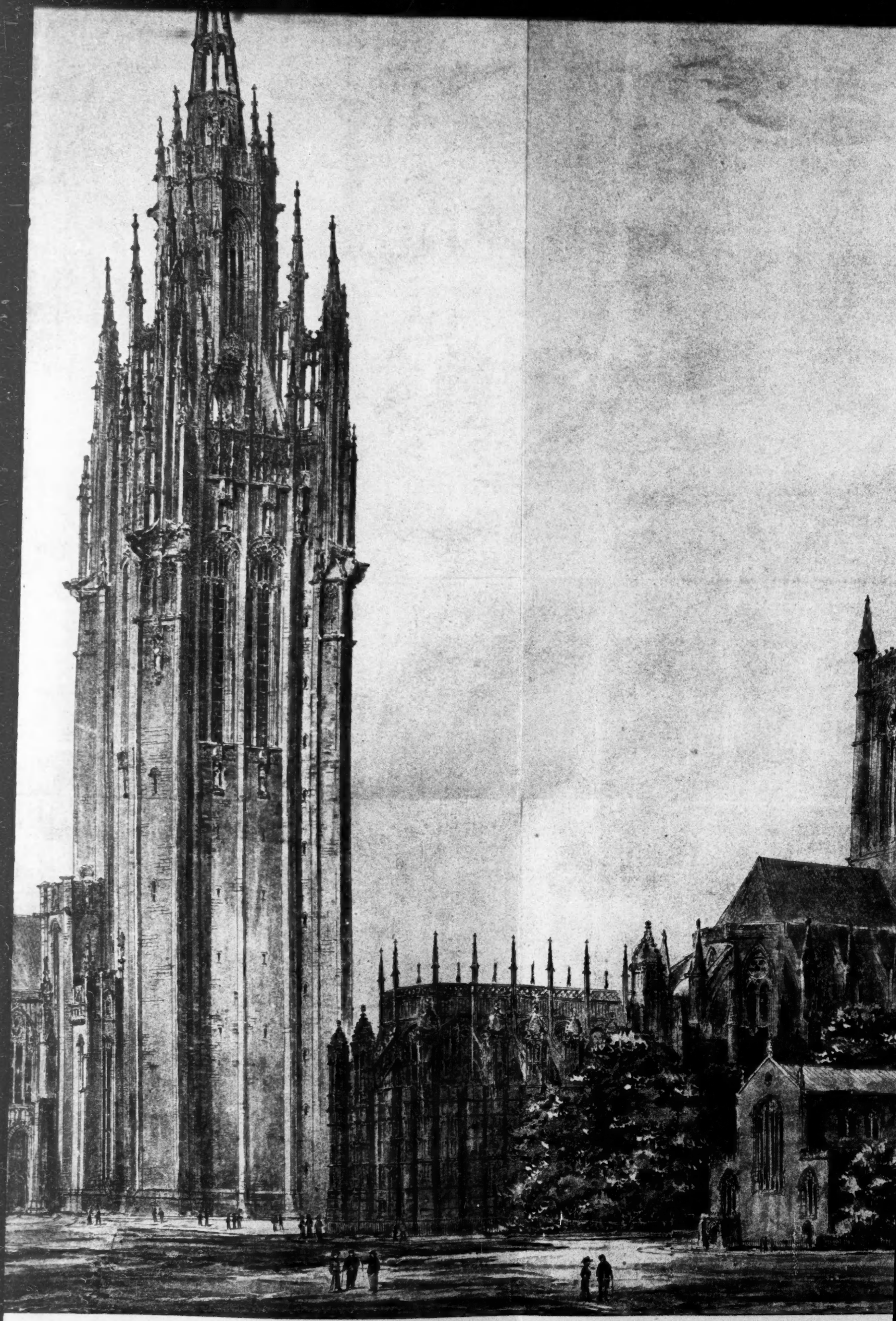


Suggestion for an Imperial Monumental Hall and Tower at Westminster. Plan.



SUGGESTION FOR AN IMPERIAL MONUMENTAL HALL AND TOWER AT WESTMINSTER.

By Mr. J. P. Seddon, F.R.I.B.A., and Mr. E. B. Lamb.



SUGGESTION FOR AN IMPERIAL MONUMENTAL HALL AND TOWER AT WESTMINSTER.

By Mr. J. P. Seddon, F.R.I.B.A., and Mr. E. B. Lamb.

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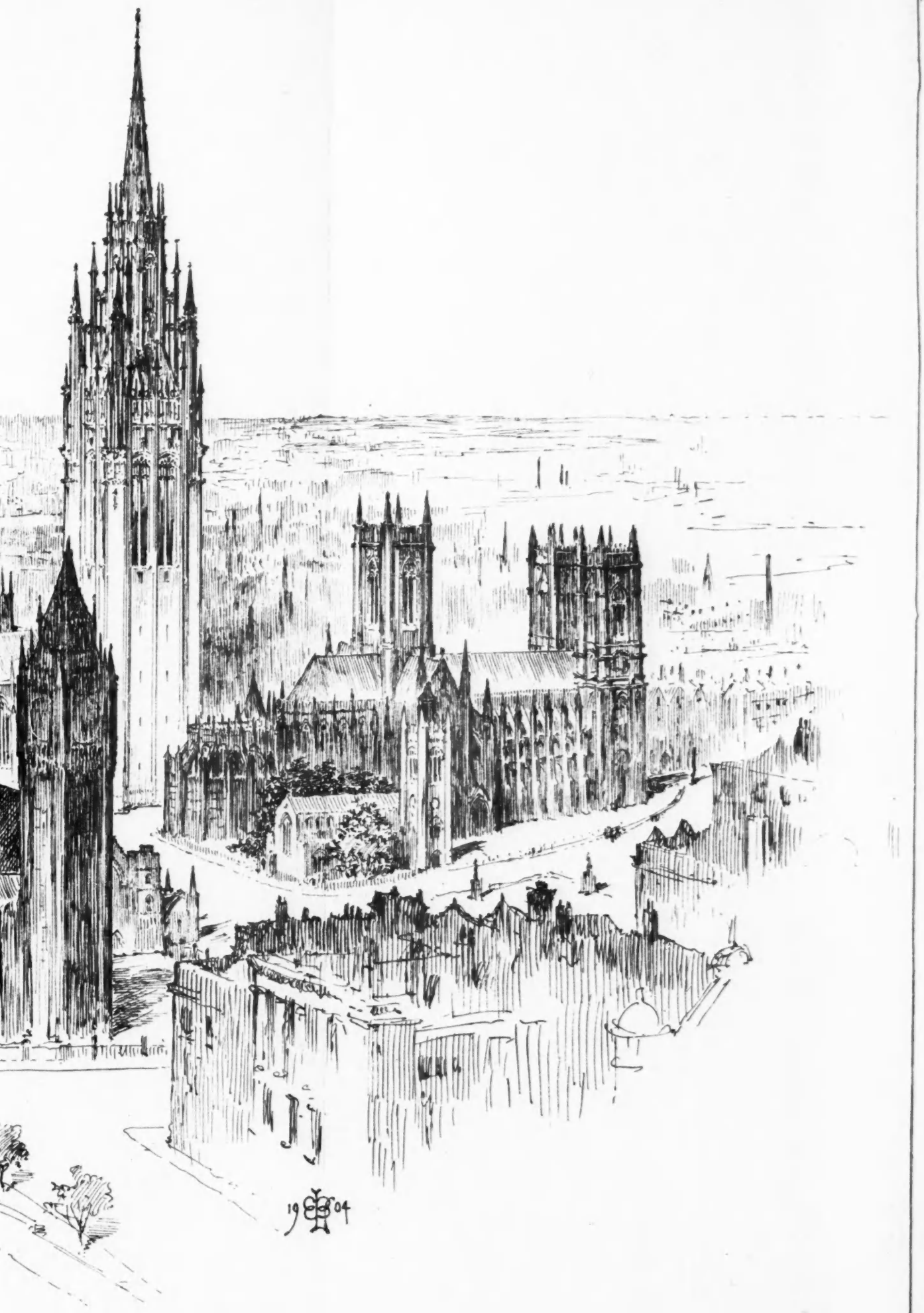
ER.

SUGGESTION FOR AN IMPERIAL MONUMENTAL HALL A

VIEW FROM BELOW WESTMINSTER

By Mr. J. P. Seddon, F.R.I.B.A., and Mr.



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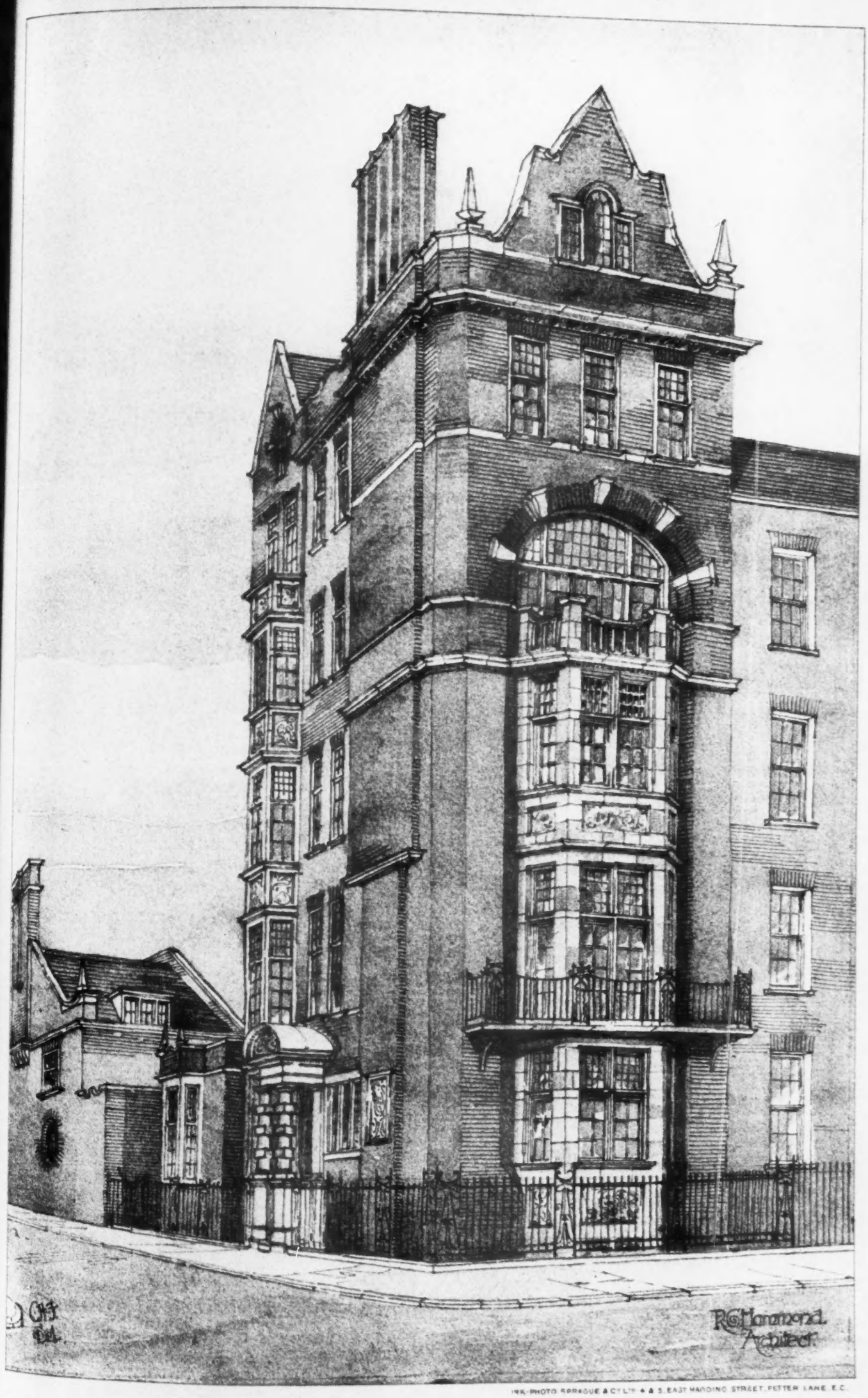
L HALL AND TOWER AT WESTMINSTER.
TMINSTER BRIDGE.
A., and Mr. E. B. Lamb.

PROPOSED DESIGN FOR A FIRE PLACE
DULCE DOMUM
FRONT ELEVATION
SIDE ELEVATION



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HOUSE, SLOANE STREET.—Mr. R. G. Hammond, Architect.

consideration, the immense scale proposed for the tower has a little too much of "megalomania" about it. A leading architectural feature on a somewhat more reasonable scale might be just as effective. But in other respects, and in regard to the plan particularly, we think the idea a very fine one, and well worthy the serious attention of the Government and the country, at least as to the main idea suggested. Even if this precise plan were not carried out, it would be something gained if the Government were induced to secure the land for such a purpose, instead of allowing it to be built over as private property. Westminster Abbey being now practically filled up as regards space for burials and monuments, we ought to contemplate the erection of a national Memorial Hall, and there is no place so suitable for it as Westminster, the historic centre of the capital.

The larger drawing has recently been exhibited, with others, in a studio near Sloane-square. The smaller one, the illustration of the scheme as it would appear from below Westminster-bridge, was specially made for us by Mr. E. B. Lamb, in order to show another aspect of the proposed grouping. As a picturesque sketch, made at the last moment, and in a wonderfully short time, it says much for its author's powers as an artistic draughtsman.

DESIGN FOR A FIREPLACE.

THIS is a design for a fireplace by Mr. Hubert Raine, which was exhibited at the Royal Academy two or three years ago, and was mentioned with commendation in our review of the Architectural room at the time.

HOUSE IN SLOANE-STREET.

THIS corner house was designed to occupy the site of two old houses, a portion of one being given up to widen the side street leading into Cadogan-square.

The external walls are faced with red bricks relieved with gauged brick arches. The stone bays and dressings are of Beer stone, the landings, porch, etc., of Portland.

The accommodation consists of thirteen bedrooms, two bathrooms; double drawing-rooms and ante-room on the first floor; dining-room, morning-room, library, and square hall on the ground floor; back stairs, service lift.

Mr. R. G. Hammond is the architect.

COMPETITIONS.

SCHOOLS, WALLSEND.—At a meeting of the Wallsend Education Committee, Canon Henderson in the chair, the sites and buildings sub-committee reported that Mr. W. S. Braithwaite, Architect to the Leeds Education Committee, who was appointed to adjudicate on the designs submitted in competition for the proposed schools at West View, had placed first the design by Mr. W. H. Knowles, F.S.A., architect, 37, Grainger-street, Newcastle, and second that of Mr. J. H. Morton, South Shields, and it was resolved that Mr. Knowles's plan be accepted. There were thirty sets of designs sent in. The schools are arranged in two blocks, one for senior and junior boys and girls, and the other for infants, and are intended to accommodate 1,300 children.

BRIDGE, AYLESFORD.—The first premiated design in the competition for a stone bridge at Aylesford over the Medway was sent in by Messrs. Dodd and Dodd, 37, Waterloo-street, Birmingham.

CHURCH AND SCHOOLS, LEEDS.—As a result of a recent limited competition for Trinity Church and Schools on the Cross Flatts Park Estate, Leeds, the designs of Mr. W. S. Braithwaite, Leeds, have been placed first. It is intended to provide a church to accommodate 650, with nave, transepts, chancel, organ-chamber, and end gallery, and a schoolroom to accommodate 400. The classrooms, ten in number, are grouped around the hall. A church parlour is also provided. The design is Late Gothic in character, is intended to be carried out in local stone, and will cost upwards of 6,000*l.*

BOOKS RECEIVED.

GREAT MASTERS: REPRODUCTIONS IN PHOTOGRAVURE. Part XI. (W. Heinemann. 5s.)

THE STEEL SQUARE. By Wm. Lanham. (E. A. Lovell, Bath. 2s.)

HEATING BY HOT WATER, VENTILATION, AND HOT WATER SUPPLY. By Walter Jones, M.I.Mech.E., etc. (Crosby Lockwood & Son. 6s.)

Correspondence.

"HOW TO JUDGE ARCHITECTURE."

SIR,—Every thoughtful reader of the *Builder* should be grateful for the article on "How to Judge Architecture" in your last issue, especially for the manly attempt to do justice to Mr. Penrose's memory. He, like an old Greek, knew as well as anyone that the refinement of the horizontal entasis would cease to exist if apparent to "the man in the street." To turn from the Parthenon to the spire, how hard would it be to decide (where doctors differ) as to the wisdom of the straight side, as at Salisbury, the concave one, as at Ulm, or the convex one of Freiburg, if each were to be condemned or praised by anyone who made that peculiarity the be-all and end-all of the design of each!

The absence of plans referred to would go far to leave the critic in the dark as to the why and wherefore of much that is inexplicable without them; indeed, I make bold to aver that very much that is purely sentimental can be infused into a plan by the lover of truth, who finds it comparatively easy, and entirely pleasing, to evolve a good elevation from a carefully thought-out plan. If the last be bad, the former cannot, of necessity, be as good as it might be, to say the least.

We most of us know that criticism of our work is frequently the most bitter and malignant from those who have the least qualification to pose as critics, and it is to be feared that similar reasoning (or unreasoning) applies also to the works of the great names of those in whose steps it is to be hoped we are humbly striving—if only at a distance—to follow. Wren's great work would have been less open to criticism had it been less interfered with by those who, not able to help, were at least all powerful to hurt. Let us invite trial by our "peers," and not by "a common jury." As you say very truthfully, the lack of good and interesting detail is a certain step towards failure. A design, too, may, as suggested, be old and also bad, as it may be new and also good; each must, in equity, be taken on its own merits, or otherwise.

E. SWINFEN HARRIS.

SOUTHWARK BRIDGE.

SIR,—I have not seen any notice in your paper respecting the reconstruction of Southwark Bridge, although the matter is of special interest as involving a great alteration in Rennie's design and both bridge and land levels on the north side; but the refusal of a House of Commons Committee to permit a rise in the Thames-street roadway, as required by the City Corporation scheme, brings the matter forward again for discussion and reconsideration.

I did before, and now again, suggest a viaduct in the middle of Queen-street for two vehicles only, continued by a bridge over Thames-street and on the north end of Southwark Bridge, leaving room for one vehicle each side of the structure. This would give a nearly level road for heavy traffic and retain space for light traffic, and also leave the old communication with Thames-street unimpaired.

CITY BRIDGE.

PATENTS IN AUSTRALIA.

SIR,—Your readers will probably be interested in hearing that the Governor-General in Council of Australia has decreed, in accordance with the new Federal Law, that patent applications for Australia can now be formally made at the Custom House of the capital city of each State. Applications so filed will be marked with the date, hour, and minute of receipt, and the applications will be subsequently recorded at the Patent Office as having been filed at that date. Applications thus filed will not be merely taken in order of their dates, but they will be held to be dated, as far as regards novelty, from the date of actually filing at the Custom House unless dated under the convention. Under the convention nearly all the principal countries and colonies have agreed to grant the right to a patentee who has filed an application for a patent in one of the countries or colonies to date any or all the other applications he may make for the same invention in other realms during the year as of the date of his original first application. The application in Australia can either be a provisional one or complete. The fees and stamp duties are just double those of an application for Great Britain and Ireland.

WM. P. THOMPSON AND CO.,
Chartered Patent Agents.

THE ARCHITECTURAL ASSOCIATION.

SIR,—As it appears that an alteration is contemplated as to the night of meeting of the Association, and as some suitable suggestions have been made in the *Builder*, let the following two then be seriously taken into consideration—viz., that the selected night of the meetings be on Tuesdays (this surely should meet with the approval of all parties concerned) and the hour be fixed for 8 o'clock, the correct and usual hour of societies of the status of which the Architectural Association ranks high as one.

A MEMBER OF THE ARCHITECTURAL ASSOCIATION.

[**** We print the letter of "a Member," but must renew our own caution against changing the day, which we think a mistake.—ED.]

FIRE RISKS IN FACTORIES.

SIR,—In view of the interest now generally exhibited with regard to fire risks, we think that our experience recently may be worth recording.

Unfortunately a rather serious fire broke out in one section of our works the other day, but, owing primarily to two causes, we have been fortunate in escaping with comparatively slight damage.

The fire commenced at one end of the top floor of a four-story building, measuring some 200 ft. by 50 ft., filled with valuable machinery, and with work in progress. The marvel is that once well alight it was possible to confine it to such a comparatively small area as was the case, about one-third of the roof being destroyed. This roof was on the saw-tooth principle, slated on the one slope, and with iron sashes and glass on the other slope; and this, in our opinion, prevented the fire from running from one end of the shop to the other. It was evident that the flames ran up the rafters under the slates very quickly, but, on arriving at the top of the ridge, they were checked by the open space, and had to curl down and commence again at a spot several feet below and at some distance away. This had to be repeated as each ridge was reached, and to this, we believe, we owe the fact that the roof escaped as it did.

The second reason for the fire being confined was the use of armoured fireproof doors over the opening into the stores adjoining. These doors stood their test remarkably well, and are hanging at the present moment in perfect working order.

P. G. EBBUTT
(For "Verity's Ltd.").

ROYAL COMMISSION ON LONDON LOCOMOTION.

AT the sitting of the Royal Commission on London Locomotion on Thursday last week evidence was given by Mr. R. W. Perks, M.P., formerly solicitor to the Metropolitan Railway Co., and at present Chairman of the Metropolitan District Railway Co. Witness described a large number of negotiations he had carried out for the amalgamation of various undertakings. He was opposed to the L.C.C. becoming the railway and transit authority for London and the suburbs, but was in favour of a tribunal to deal with all questions affecting the London and suburban railway, street, and other traffic. With a view to increase the efficiency of London railways, and to enable them to provide suburban services, witness submitted a number of suggestions to the following effect:—(1) That the Metropolitan and District Companies should amalgamate, and should charge a uniform fare; (2) railway companies should have power to run upon main thoroughfares cars propelled by electricity, or other power as feeders for their main lines along routes beneath or over which it is inexpedient to construct railways, and that power should be given to the railway companies to subscribe to tramcar undertakings; (3) the present prohibition upon the railway companies acquiring and holding lands should be removed, so that the railway companies might be encouraged to construct suburban lines by looking to some extent for their remuneration to the increment which would take place from the value of the lands by the construction of the railways; (4) railway companies should be exempt from local taxation along routes where new competition had been set up by the local authorities running at the public cost competitive tramcar or railway undertakings.

At the sitting on Friday, Mr. Perks gave further evidence. He pointed out that the Thames Embankment, Holborn Viaduct, and several bridges were built by the Metropolitan Board of Works to a large extent from the coal dues, which produced 350,000*l.* a year. In his opinion that was a very reasonable form of raising capital for the construction of Metropolitan works. He would not hesitate himself to reimpose this tax for the purpose of constructing main roads and other works. He suggested that a circular road should be constructed round London which would couple up all the

little towns round. The road would be seventy-two miles long and 250 ft. wide, with two bridges over the Thames. It would couple up numerous little suburban towns, but in twenty years' time the whole of the districts would be covered with houses. The cost of such a road would not be more than the cost of Kingsway. He estimated the cost at 4,500,000*l*. Electric tramcars could run on this road.

OBITUARY.

MR. D. W. STEVENSON.—We regret to hear of the death, on March 18, at Edinburgh, after a long illness, of Mr. D. W. Stevenson, the sculptor, aged sixty-two years. Mr. Stevenson was elected an Associate member of the Royal Scottish Academy in 1877; nine years subsequently he became a full member of the Academy. When fifteen years of age he entered, as a pupil, the studio of William Brodie, sculptor. He designed and executed several public statues and memorials for both Great Britain and foreign countries, and carried out many commissions for private individuals. Of his more important sculptured works we should mention the bronze statue of "Highland Mary" set up at Dunoon eight years ago; the statue, also in bronze, of Burns at Leith (1893); the marble bust of Burns for Tullie House at Carlisle; the statues of King James I. of Scotland and of John Napier of Merchistoun, the inventor of logarithms, for the façade of the National Portrait Gallery at Edinburgh (1898); the marble busts of Thomas Carlyle for the Carlyle Memorial House in Cheyne-row, Chelsea; of William Burns, the historian, and Allan Ramsay for the Wallace Memorial at Stirling; of Dr. Robert Brown, the botanist, for the Picture Gallery of the Marischal College at Aberdeen; and the medallion portrait, in bronze, set up two years since in the Indian Museum at Calcutta in memory of the late Dr. John Anderson, who was the first superintendent of the Museum during the interval 1865-86. Mr. Stevenson was also the sculptor of the monument to the late R. Burns Clegg in the East Cemetery at Kinross, and of the drinking fountain, carved in Scotch red sandstone, with a marble bust of the late H. W. F. Bolckow, which in the autumn of 1896 was erected in the Albert Park at Middlesbrough.

MR. B. H. NUNN.—We have to record the death, on the 19th inst., of Mr. B. H. Nunn, architect, of Brighton. Mr. Nunn, who was the son of a builder at Homerton, made the original drawings for the Brighton Workhouse, in which work he was associated with the late Mr. George Maynard, then Surveyor to the Guardians. After Mr. Maynard's decease he designed and carried out the new casual wards and two new infirmary pavilions. The last public work upon which he was engaged was the new board-room and offices in Prince's-street for the Guardians. Mr. Nunn acted as engineer for the main drainage scheme of Hurstpierpoint, which was carried out under his direction. He also did much work as a quantity surveyor, in which capacity he was engaged on all the important contract works carried out for the Brighton and Hove governing bodies, and many works out of Brighton, including extensive works at the Asylum, Hayward's Heath, and at Lewes Gaol, police stations at Portslade, Preston, Hurstpierpoint, Worthing, and Patcham, new workhouse, Chailey, etc. In 1891 Mr. Simeon Hunt became his partner, and has carried on the practice since 1895, when Mr. Nunn retired.

GENERAL BUILDING NEWS.

CULROSS ABBEY CHURCH.—A number of tradesmen have been asked to tender for the work of restoring Culross Abbey Church, which in the early part of last century was deprived of some of its best architectural features. To thoroughly renovate the church a sum of about 5,000*l*. will be required. Seventeen hundred pounds have been subscribed, apart from the heritors' contribution. Alternative schemes have been prepared by Sir Rowand Anderson.—*Scotsman.*

CHURCH, GRIMETHORPE, YORKSHIRE. — The Church of St. Luke, which has been erected at Grimethorpe, at a cost of 6,500*l*., has just been consecrated, as we stated last week. The church is built of red brick with stone facings. The building consists of a nave of five bays, with north aisle, chancel, organ chamber, choir, clergy vestries, and porch. It is intended at a future time to have a south aisle and chapel added to the church, the south side now being built up with a temporary wall. At present the church is illuminated by lamps, but these will be replaced by electricity as soon as possible. There is seating accommodation for about 500 persons. The architect was Mr. C. Hodgson Fowler, Durham, and Messrs. Bowman and Sons, Stamford, were the contractors.

ST. BARNABAS'S CHURCH, JESMOND. — This is the first church built under the Jesmond Church extension scheme. The style of St. Barnabas's Church may be described as an adaptation of XVth century architecture. The chief features that strike one on looking at the building are the apsidal ends east and west, which were originally suggested by the peculiar shape of the site. The plan consists of nave and chancel, 28 ft. wide, the combined length of which is 137 ft., narrow aisles, containing passages, which can be extended in width when desired, so as greatly to increase the accommodation, a tower, and clergy and choir vestries. The tower, when finished, will rise to a height of 85 ft., with traceried battlemented parapet and pinnacles. At present the height is about 40 ft., with a turret containing a bell in one angle. The materials are stone externally, chiefly from the Byker quarry; internally the walls are faced with plaster. The roofs are of pitch pine, the outer covering being of Westmorland green slates. The screens and wall panelling are of pitch pine. The nave has six bays on each side of rather low arches, with an arcade of pointed arches above, springing from slender shafts. The same arrangement is found on the south side of the chancel, whilst on the north side it is varied by a lofty organ chamber arch. The roof is of the open timber type. The pulpit is of oak from the designs of the architects, and executed by Messrs. Brown and Hughes, of Newcastle. The choir fittings were originally in the Parish Church. The electric installation has also been given by the Parish Church congregation, the brass gasoliers originally at the Parish Church having been converted into electroliers and installed by Messrs. Reid, Ferrens, and Co. The heating is by steam, and has been carried out by Messrs. Dinning and Cooke; the builders and joiners are Messrs. Wm. and G. H. Scott, of Sunderland, the work having been carried out under the superintendence of Mr. R. Whichello, the clerk of works. The church was designed by the late Mr. W. S. Hicks, and has been completed by the present firm of Messrs. Hicks and Charlewood, of Newcastle.—*Newcastle Chronicle.*

R.C. CHURCH, GLENAMADDY, IRELAND.—The foundation-stone of the new Church of St. Patrick, Glenamaddy, was laid recently. The style of the new building is Gothic, and the plan consists of nave and aisles. The clerestory is to be supplied with eighteen pairs of lancet windows, suited to the height, and the roof is to be supported by sixteen octagonal pillars. The walls are supported by buttresses, and the outside will be of ashlar. The building is to be 130 ft. long and 60 ft. wide, and capable of accommodation for from 1,000 to 1,200 worshippers. Mr. Thomas Hamilton, of Galway, is the architect.

PRIMITIVE METHODIST CHURCH, WHITLEY BAY.—The new Primitive Methodist Church at Whitley Bay occupies a site at the junction of Oxford-street and North-parade, Whitley Bay. The main entrance doors face into North-parade and open into a porch, beyond which there is an inner vestibule, with doors leading directly into the aisles of the church. The internal dimensions of the church are as follows:—Length, 48 ft.; width, 36 ft., with a width of 40 ft. between transepts. There is seating accommodation for over 300 adults. The choir is placed in a recess at the back of the church. The rostrum and communion stand near, and an organ chamber is also provided. At the rear of the church there are a ministers' vestry, stewards' vestry, tea-room, lavatories, and outbuildings, also a hall and a side entrance porch. The walls are of brick, the main elevations being faced with red pressed bricks, with stone dressings. At the north-west corner there is a tower and spire. The buildings have been erected by Mr. W. A. Styan, of Whitley Bay, from the designs of Mr. T. E. Davidson, of Newcastle.

LITTLE ILFORD CONGREGATIONAL CHURCH AND SCHOOLS. — The opening ceremony of these buildings took place on the 17th inst. The block occupies a corner site, and a tower is a prominent feature of the design. The facings are of pressed red brick. The church provides accommodation for over 800 persons. A school-room, church parlour, and various class-rooms are provided. The contract has been carried out by Messrs. Gough and Co., Hendon, the architects being Messrs. George Baines and R. Palmer Baines, London, W.C.

PUBLIC SCHOOL, LANGSIDE. — The School Board of the parish of Cathcart have now accepted the plans for the new public school which is to be built at Woodlands, Langside. The successful architect is Mr. Andrew Balfour, I.A., Glasgow. The school is to accommodate 1,600 children, including 400 in the laundry and cookery rooms, and the total cost is estimated at 18,000*l*.

WESLEYAN BUILDINGS, LEATHERHEAD.—Mr. J. Weir, of Victoria-street, S.W., has prepared the plans for the erection of a large two-story building on the site of the old iron school-room adjoining the church at an estimated cost of 1,500*l*. The upper floor will be devoted to the "Wesley Hall," capable of seating 250 people, while below there will be class-rooms, rooms for Wesley Guild meetings, minister's vestry, and lavatories. In connexion with the scheme, new heating apparatus has been placed in the church at a cost of 100*l*.

CHURCH BUILDINGS IN KINGSWAY. — The Wesleyan Methodists have secured a site, with a frontage of 98 ft. and a mean depth of 70 ft., lying on the west side of Kingsway and to the south of Great Queen-street. The ground will be used for some extension buildings in connexion with the existing chapel in the latter thoroughfare, and the new buildings will stand at the corner of the projected new street to open westwards out of Kingsway and leading to Great Wild-street, Drury-lane.

LECTURE HALL AND SCHOOLS, YARMOUTH. — New Lecture Hall and Wesleyan Schools are being erected to meet the requirements of the Wesleyan Church, Dene Side, Yarmouth. The building is to be erected on a site to the south of the chapel, and is to consist of a central hall, with class-rooms on both sides. It will be lighted by electric current from the Corporation mains. The designs were prepared by Mr. R. Scott Cockrill, son of the Borough Surveyor. The builder is Mr. J. Easto, of Dene Side.

NEW INFECTIOUS HOSPITAL AT CONISBRO'.—The opening of the new Infectious Diseases Hospital which has been built at Conisbro' by the Doncaster and Mexbro' Joint Hospital Board took place on the 25th ult. The Hospital is situated on a site of 7½ acres, about 5 acres of which have been inclosed. The buildings consist of an Administrative Block, comprising rooms for the use of the Medical Officer, the matron, and the nursing staff, with kitchen and store accommodation. This block is more than sufficient to meet the present requirements, and it has been built with a view to future extension of the wards. The Scarlet Fever Block consists of Male and Female Wards, with two special wards containing one bed each for paying patients, with a large convalescent room over the central portion, provided with nurses' room, bath-room, and sanitary accommodation. There is also a Typhoid Block, with similar accommodation, and an Isolation Block for doubtful and other infectious cases. The Laundry and Boiler-house Block contains a wash-house fitted with the usual appliances for washing by machinery, an ironing-room with fan ventilating, drying closet, and a disinfecting chamber, fitted with Thresh's disinfector. There are also a mortuary, stable, and ambulance sheds. A boiler-house, containing two boilers, which supply steam for the laundry, disinfector, hot-water apparatus for heating the wards, hot water supplies to all the baths and lavatories throughout the buildings, and for working the electrical plant. The Ward Blocks are all furnished with a glass verandah in the front, having a south aspect for the use of convalescents. The Hospital is appropriately furnished throughout, and telephone communication is provided between the various blocks. The whole of the buildings are illuminated by electric light from the De Laval Turbine Dynamo in the boiler-house, and the water is supplied from the company's main. The system of drainage is a simple one on approved lines. The buildings at present provide for the treatment of thirty-six patients, and the cost works out at 339*l*. per head. Messrs. Harold Arnold and Son, of Doncaster, were the contractors; Mr. J. M. Morton, of South Shields, the architect; Messrs. Benham and Sons, of London, sub-contractors for the engineering. The duties of clerk of works were carried out by Mr. Fred. Simpson, of Doncaster. The strings and dressings are of Doulton's buff terra-cotta, the ward stoves are Doulton's, as are also the whole of the sanitary fittings.

CHURCH ARMY HOMES, SWANSEA.—The St. David's Church Army Labour and Lodging Homes were opened recently by the Bishop of St. David's. The new building is situate in Rutland-street, and the hon. architect was Mr. H. C. Portsmouth. The "labour" and "lodging" homes are entirely separate. The premises provide a yard and workshop, quarters for the officer in charge and his family, reading-rooms and kitchens for each department, and fifty-two cubicles for sleeping accommodation. There is also a room set apart for a chapel. The top floor, of sixteen cubicles, is expected to be sufficient for the "labour" home, and the other thirty-six cubicles can be used for the "lodging" home.

LIVERPOOL COUNTRY HOSPITAL FOR CHILDREN. —The annual meeting of the friends and donors of the Liverpool Hospital for Children at West Kirby was held at the Town Hall on the 15th inst., when it was announced that

plans for the hospital to be erected at Heswall, to accommodate 200 children when complete, had been prepared by Mr. A. P. Fry and approved by the committee.

POST-OFFICE EXTENSION, NORWICH. — The new portion of the Norwich General Post-office was opened recently. The building has been erected by H.M. Office of Works, the architect being Mr. W. T. Oldrieve, F.S.I., whilst the building operations have been carried on under the supervision of Mr. W. T. Bowman. The building, which is of Portland and Bath stone, comprises practically four stories. At the end of Crown-road an entrance for mail vans into the loading platform is provided, and the sorting office is on the ground floor. The postmen's sorting-room is on the first floor, and the instrument-room on the top floor, whilst on the King-street side of the basement is a caretaker's department with accommodation for packages, and storage for batteries in connexion with telegraphy. Extra accommodation has been provided for postmen in the shape of retiring-rooms, and separate rooms have also been set apart for male and female telegraphists.

ASYLUM, STORTHES HALL ESTATE, NEAR HUDDERSFIELD.—In a few weeks' time part of the new county asylum on the Storthes Hall estate, near Huddersfield, will be ready for occupation. It is being built by the West Riding County Council, and, when completed, will cost nearly half a million of money. The scheme is being carried out in sections. The buildings that will shortly be opened comprise an acute hospital for 200 patients and two cottage homes for workers, accommodating thirty-five cases each; but plans are now under consideration for the erection of the main institution to make provision for 600 further cases. The two firms of contractors who have carried out these works are Messrs. J. Radcliffe and Sons, of Huddersfield, and Messrs. W. Nicholson and Sons, of Leeds. The grounds have been laid out at a cost of 3,400*l*., under the supervision of Mr. J. Vickers Edwards, the County Architect, in accordance with whose plans the whole asylum is being built. When completed it is intended that the institution shall house 2,000 inmates.

TEMPERANCE HALL, WYKE, YORKSHIRE.—Mr. T. P. Whittaker, M.P., recently opened the new hall which has been erected at Wyke in place of the old Temperance Hall. The new hall is of two stories. The lower room, which is 40 ft. long and 31 ft. wide, will be used for Sunday-school purposes. Above is a hall affording seating accommodation on the floor for 270 persons, and with a gallery for an additional hundred. The building has been erected to the designs of Mr. John W. Rowson, architect, of Girlington, Bradford. It will cost about 1,200*l*.

EASTBROOK HALL, BRADFORD.—This new hall, which is to be used for mission purposes, was opened on the 21st inst. The architects are Messrs. W. J. Morley and Son, Bradford. The building is 94 ft. by 90 ft., and is designed on the amphitheatre principle, octagon in shape, every seat being in full view of the platform. Accommodation is provided for 2,000 people. The main entrance (20 ft. wide) is from Leeds-road, with a large vestibule or crush hall 30 ft. by 18 ft., and four other entrances are provided at different points, each with a staircase leading to the gallery, thus affording ample means of entrance and exit to and from all parts of the hall. The gallery extends all round the hall and communicates with the platform on both sides. The organ, which was taken down when the old chapel was removed, will be re-erected behind and above the platform. The seats will be all separate tip-up seats, raised up in tiers for a large portion of the ground floor space as well as in the gallery. In addition to the large hall, there are included in the scheme a large lower hall about 40 ft. square, ministers' vestry, sisters' room, male adults' room, and young women's room, besides several class-rooms in different places, and a room for the choir and orchestra. The Leeds-road front is given over to rent-producing property in the form of shops and ware-rooms. A combined system of heating and ventilation is being installed by Messrs. J. Stott and Co., of Oldham. A large fan is fixed in the basement near the main entrance for the purpose of forcing fresh air into all parts of the building, but before passing into the building the fresh air is freed from all impurities by means of the Stott patent air filter or washer, which is in the form of a huge cylinder made of specially-prepared fibrous material, and revolves in a trough containing water. The heating of the large hall and the other part of the building will be independent of each other, and the temperatures can be controlled by the attendant in charge. A large air-mixing chamber will be provided above the ceiling of the large hall, into which the warmed or cooled air will be delivered, passing through numerous openings formed in the ceiling itself, the foul air being driven out through flues formed in the walls and carried to a main outlet shaft. The following are the names of the various contractors:—Masons' work and concrete, Messrs. J. Brown and Sons (Bingley); joiners' work, Messrs. Greenhow and Murgatroyd (Keighley); plumbers' work, Mr. Geo. Thompson (Leeds); plasterers' work, Mr. Thos. Bolton (Bradford); slaters' work, Messrs. Hill and Nelson (Bradford); painters' work, Mr. F. Holdsworth (Shipley) and Messrs. C. Pratt and Sons (Bradford); faience work, Mr. A. Whitehead (Leeds); steel work, Messrs. Dorman, Long, and Co. (Manchester); cast-iron work, Messrs. E. and W. H. Haley (Bradford); fibrous plaster work, Mr. W. H. Horne (Idle); white glazed bricks, Mr. H. R. Allen (Halifax); heating and ventilating, Messrs. J. Stott and Co. (Oldham). Mr. J. Billington acted as clerk of works.

STAINED GLASS AND DECORATION.

MEMORIAL WINDOWS, PUDSEY.—Two stained-glass windows have just been placed in Trinity Methodist Church, Pudsey. The windows have been designed and executed at the studios of Kayll and Co., Leeds.

MEMORIAL WINDOW, PORTON, WILTS. — A memorial window has been placed in St. Nicholas Church, Porton. The window consists of two lights, one representing the Good Shepherd, the other the Sower, and each is surmounted by a canopy with an angel bearing a scroll. Messrs. Clayton and Bell, Regent-street, London, executed the work.

HAMPSHIRE WAR MEMORIAL.—A stained-glass memorial window and tablets, which have been erected in memory of the men of the Hampshire Regiment who were killed in South Africa, were unveiled recently in Winchester Cathedral. The memorial has been placed in the south aisle of the nave and occupies a bay-window on the east of the door. The work was carried out by Messrs. Powell and Sons, of Whitefriars, London.

HAWTHORN CHURCH, SEAHAM HARBOUR.—Two single-light memorial windows have just been executed by Messrs. Percy Bacon and Brothers, of London, and placed in Hawthorn Church, one representing St. Gabriel and the other St. Michael. An inscription brass is placed under each window.

SANITARY AND ENGINEERING NEWS.

WATER SUPPLY, BUDLEIGH SALTERTON.—The Urban District Council, at a special meeting held on the 15th inst., adopted a scheme of water supply from the Colaton Raleigh source at an estimated cost of 10,000*l*., and instructed their engineers, Messrs. Beesley, Son, and Nichols, M.M.Inst.C.E., of Westminster, to prepare the necessary plans and take the customary steps in connexion with the promotion of the requisite Act of Parliament.

FOREIGN.

GERMANY. — Professor Theodor Fischer, of Stuttgart, has applied for a patent for a plan of a theatre, which, by means of a movable ceiling, can be made into a large opera house or a small theatre at will. This ingenious invention should be of value in those towns where the expense of two separate buildings cannot be met.——Herr F. W. Büsing died at Berlin on February 25 in his seventieth year; Herr Büsing has been for some time editor of the German Architectural News.——The rooms for the architectural section of the Berlin Art Exhibition of 1904 have been designed by the architect Herr Schweitzer.——The new Evangelical Church at Weinfelden, designed by the architect Herr Pfleghard, is completed.

AUSTRIA.—A home for students is to be built in Vienna in connexion with the Technical Schools. The plans have been designed by Herr Theodor Bach, and the work is to be carried out by the Vienna Building Society. The building will accommodate about sixty students, and will also contain lecture halls, etc.——It has been decided to build an annexe to the Museum of Arts and Crafts in Vienna. The plans for the new building, which will be used chiefly for exhibitions, have been sketched out by the architect, Herr Ludwig Baumann. ——The historical painter Professor Rudolf Müller died on March 7 at Reichenberg in his eighty-eighth year.——A model of the new Alpine railway in course of construction is to be sent to the Exhibition at St. Louis, with some photographs illustrating the same subject.——A site for the erection of a new workmen's shelter has been bought in Vienna. The building is to accommodate 500 to 600 persons.

SWITZERLAND.—The artist Herr Emil Schill is executing the mural paintings in the Town Hall at Basle; these will represent the Commerce and Industry and the Art and Science of the town. There will also be a large painting representing the Swiss Confederation (Bundesschwur) of 1291.

ISTRIAN CEMENT.—According to a recent despatch from H.M. Consul at Trieste, a large establishment for the manufacture of Portland cement is to be erected near Albona, in Istria, Austria-Hungary. The output is destined entirely for exportation. It is said that immense quantities of stone adapted for the manufacture of cement exist in the neighbourhood as well as a coal mine. All are situated close to the port of Rabaz.

MISCELLANEOUS.

GOOD FRIDAY WEEK.—In consequence of the Easter Holidays, next week we go to press a day earlier than usual. All communications for the Editor must reach him by *first post on Wednesday morning*, except lists of tenders, which will be received up to 10 a.m. of the same day.

PROFESSIONAL AND BUSINESS ANNOUNCEMENTS. — Mr. E. Roscoe Mullins, the sculptor, has removed from 24, Greville-road, N.W., to "Shirley," Dollis-avenue, Finchley, N.

THE MUNICIPAL YEAR BOOK.—The Municipal Year Book for 1904 (edited by Mr. Robert Donald, and published by Edward Lloyd, Ltd., Salisbury Square, E.C.), has been considerably improved. The plan of the book is that of a general summary of the work of each authority under the name of the city, town or district, with the statistical and other information arranged in special sections. The eighteen sections of the book are in the following order:—(1) London Municipal Government (County Council, City Corporation, Borough Councils, Water Board, Asylums Board, etc., etc.). (2) Municipal Government in England and Wales (contains the general summaries of the work of the Municipal Corporations, Urban District Councils, and Rural District Councils). (3) Municipal Government in Scotland (contains general summaries of the work of the principal Scotch cities and towns). (4) Local Government in Ireland (contains general summaries of the work of the principal Irish cities and towns). (5) Water supply. (6) Gas supply. (7) Tramways. (8) Electricity supply. (9) Housing of the working classes. (10) Markets. (11) Telephones. (12) Baths and wash-houses. (13) Education. (14) Libraries. (15) Cemeteries. (16) Refuse and sewage disposal. (17) Local taxation returns. (18) Municipal trading. There is also a directory of the principal societies and organisations connected with the various branches of local government. The work contains a mass of useful information admirably arranged. We have often had occasion to use previous issues of the Year Book, and rarely, if ever, have looked in vain for what we expected to find.

CHURCH BUILDING SOCIETY. — The Incorporated Society for Promoting the Enlargement, Building, and Repairing of Churches and Chapels held its usual monthly meeting on the 17th inst. at the Society's House, 7, Dean's-yard, Westminster Abbey, S.W., the Rev. Canon C. F. Norman in the chair. Grants of money were made in aid of the following objects—viz., building new churches at Bounds Green, St. Gabriel, Middlesex, 180*l*.; Maney, near Sutton Coldfield, Warwick, 125*l*.; and Prestwich, St. Hilda, Manchester, 75*l*.; and towards enlarging or otherwise improving the accommodation in the churches at Caerphilly, St. Martin, near Cardiff, 75*l*.; East Tilbury, St. Catherine, Essex, 20*l*.; Harpole, All Saints, near Northampton, 25*l*.; and Meshaw, St. John the Baptist, near South Molton, Devon, 5*l*. A grant was also made from the Special Mission Buildings Fund towards building a mission church at Bushey, Herts, 50*l*. The following grants were also paid for works completed:—Ruckinge, St. Mary, near Ashford, Kent, 15*l*., balance of a grant of 35*l*.; Rock Ferry, St. Barnabas, Cheshire, 135*l*.; Accrington, St. Mary Magdalene, Lancs., 150*l*.; and Plumstead, St. Alban, Kent, 50*l*. Two hundred and thirty-one pounds was also paid from trust funds held by the Society towards the repairs of eighteen churches. The Society likewise accepted the trust of sums of money as repair funds for the churches at Anfield, St. Margaret, near Liverpool, and Kenilworth, St. John. The annual general court of the Society will be held on May 19 at the Church House, Dean's-yard, Westminster Abbey, at 3 p.m. The chair will be taken by the Lord Bishop of London.

ABERDEEN CITY IMPROVEMENTS. — The Town Council of Aberdeen discussed at a recent meeting the proposed scheme of improvements. On the motion of Lord Provost Walker, seconded by Bailie Glass, it was unanimously resolved to proceed with the Gallowgate improvements, at an estimated cost of 55,000*l*. The street will be widened to 40 ft., and a feature of the plan is the provision of a public garden. On the proposal to widen Broad-

street between Queen-street and Union-street, at a cost of 30,000*l.*, there was a long discussion. By seventeen to sixteen the Lord Provost's motion for carrying out the widening was adopted. By the same majority the reconstruction of the Town House, at a cost of 30,000*l.*, was carried. The next portion of the scheme considered was the widening of College-street to 40 ft. between Bridge-street and Marywell-street, and the formation of a new thoroughfare from Wellington-road to Holburn-street, the estimated cost being 39,000*l.* This branch of the scheme was carried by twenty-seven to three. Application will now be made in the present session of Parliament for a Provisional Order under the Private Legislation Procedure (Scotland) Act, 1899, to carry out the proposals adopted. The total cost of these works is 154,000*l.*, but it is expected that 27,000*l.* will be realised for the feuing ground at Gallowgate and along the new road.

THE "INVICTA" LOCOMOTIVE.—The locomotive engine which Sir David Salomons has offered to present to the London County Council for erection on some site in London was, it appears, a contemporary, if not a predecessor, of the "Rocket" and of the "Locomotion," and was built by Stephenson. It was used upon the railway line from Canterbury to Whitstable that was opened in May, 1830. After a while the railway was worked by horse-power, and the "Invicta," offered for sale in 1839, was ultimately stored by the South-Eastern Railway in their works at Ashford. The locomotive runs upon two pairs of coupled wheels, 4 ft. in diameter; the boiler, 10 ft. 5 in. long by 3 ft. 4 in. diameter, contains a single flue, 20 in. in diameter; the cylinders, 24 in. long, are inclined over the leading wheels and drive the trailing wheels, and have a diameter of 10½ in.; the stroke is 18 in.; the engine is of 12 horse-power, and measures 13 ft. 6 in. in length over all.

CHAPTER HOUSE, LIVERPOOL CATHEDRAL.—A fund, estimated at 10,000*l.*, has been opened by members of the Order of Freemasons for defraying the cost of building the Chapter House which it is proposed to dedicate to the memory of the late Earl of Lathom.

ADVERTISEMENT REGULATIONS IN NEW ZEALAND.—The authorities in New Zealand appear to be adopting a most spirited and enlightened line of action in regard to checking the disfigurement of cities or sites by advertisement—affording an example which might well be taken to heart by the Government and by local authorities at home. The Municipal Corporation Amendment Act, passed last November, contains a provision enabling municipal councils to make by-laws "for regulating, controlling, or prohibiting the display upon, or over, public buildings, walls, fences, lamp-posts, pavements, or hoardings, situated in, or upon, or adjoining any land or street the property of the Corporation or under the control of the Council, or the display in any manner so that it shall be visible from any street or public place of posters, placards, handbills, writings, pictures, or devices for advertising or other purposes." The Police Offences Amendment Act, which became law the month before, included the following regulation:—"Every person who, without the special permission first had and obtained of the Commissioners of Crown Lands, of the local authority, or of the controlling authority of any educational or other public reserve, as the case may require (the proof of which permission shall rest on the person claiming to act thereunder), paints, carves, or otherwise affixes, or displays, any letters, words, figures, or device for advertising, or other purposes, upon any land vested in the Crown or in any local authority, or upon any such reserve as aforesaid, or upon any such building, fence, or other structure erected thereon, shall for every such offence be liable to a penalty," etc. In another direction, powers of the highest importance are conferred by the Scenery Preservation Act, 1903, which provides as follows:—"The Governor may from time to time by proclamation declare that any lands so recommended to be reserved shall be inalienable unless by special Act of Parliament passed in that behalf, and no person shall cut or remove timber or in any way interfere with such lands or damage the scenic features thereof, and such lands may be fenced, preserved, and conserved intact as, and for, an inalienable patrimony of the people of New Zealand."

THE TECHNICAL INSTITUTE, NEW CROSS, LONDON.—The Goldsmiths' Company have addressed a communication to the director and staff of their Technical and Recreative Institute at New Cross intimating that the Institute will be closed by them as from September 29 of the current year. The Company have arrived at that decision, after much consideration, in view of the altered conditions imposed by the operation of the Education Act for London, whereby the supreme control of the Institute, for which they provided the site and buildings, and which they have equipped and maintained since its foundation sixteen years ago, out of their own private resources, now passes to another authority in the Metropolis. Reviewing their position, the Company feel that they are consequently unable successfully to continue as heretofore the important and independent work of their Institute, which, at the time of its establishment, constituted the only technical school after its kind in southern London. They are of opinion that it is not possible for a purely voluntary institution supported by a private body to compete successfully with institutions maintained at the public expense out of the funds which have lately become available for that purpose in London. The present buildings at New Cross were opened by the King, then Prince of Wales, on July 22, 1891, and were erected after the plans and designs of Mr. J. Wornham Penfold, architect, and surveyor to the Goldsmiths' Company. They include the old buildings of the Royal Naval School erected in 1842-3 which, with 7 acres of land, the Company purchased and extended for their later uses.

WAR MEMORIAL, EXETER.—A tablet is to be placed in the Drill Hall, Exeter, on which is inscribed the names of the men of the 1st Volunteer Battalion of the Devonshire Regiment who volunteered for service in South Africa during the war. The work has been executed by Messrs. Harry Hems and Sons, of Exeter.

"OLD" OXFORD AND ITS WORTHIES.—Supplementing the project which was accomplished, and with considerable success, at Cambridge some years ago, a consultative Committee, of which the President of Magdalen is chairman, have made arrangements for holding exhibitions at Oxford of portraits of eminent members of the University and of maps, plans, and views to illustrate the topographical and architectural history of the City and of the University buildings. The first exhibition will be opened on April 13, and will remain open until the middle of the summer term, in the East Writing School. It will consist of a series of portraits of historical personages who died before the year 1625 which are now in the possession of the University authorities, the several Colleges, and the Corporation of the City.

CAPITAL AND LABOUR.

EMPLOYMENT IN THE BUILDING TRADES.—According to returns furnished by seventy-five employers' associations, whose members are estimated to employ about 84,000 workpeople, and by trade unions with an aggregate membership of about 179,000, employment generally continues dull and much the same as a month ago. Compared with a year ago it is rather worse. Employment with bricklayers is reported as dull generally and much the same as last month, but worse than a year ago. With masons employment was fair in England, but worse than either a month or a year ago; in Scotland it was dull and much the same as in January last and in February, 1903. With carpenters and joiners, painters, slaters, and tilers it was dull generally, but in the case of the painters there was a slight improvement as compared with a month ago. The percentage of unemployed trade union carpenters and joiners at the end of February last was 6·9, compared with 7·7 at the end of January and 5·0 at the end of February, 1903. The percentage of unemployed trade union plumbers at the end of February was 9·3, the same percentage as at the end of January, compared with 8·2 per cent. a year ago.—*Labour Gazette.*

Legal.

ENDANGERING THE THAMES TUNNEL.

IN the Chancery Division on the 18th inst. Mr. Justice Farwell delivered judgment in the case of the East London Railway Co. *v.* the Conservators of the River Thames.

In this case the plaintiffs sought an injunction to restrain the defendants from dredging, etc., the bed of the Thames so close to the crown of the Thames Tunnel as to endanger its safety. What the defendants proposed to do to improve the trade of the port of London was to deepen the channel so that vessels of a larger size could come up as far as London Bridge. The plaintiffs' case was that the defendants, in order to accomplish that, were dredging the bed of the river, and intended to go so near the crown of the tunnel that it was not improbable water might break in and flood it and probably Rotherhithe as well.

The defendants' case was that under their statutory powers they were entitled to carry out the necessary works for improving the river's navigation, and they said that if the plaintiffs were afraid of their tunnel they ought to take steps to strengthen its construction.

His Lordship, in giving judgment, said it was absurd to suppose that plaintiffs, who had gone to enormous expense to acquire and work traffic through the tunnel should have that all taken away by the operation of the defendants. The plaintiffs had obtained Parliamentary sanction to construct a line through the tunnel for the public benefit, and, if the tunnel was rendered useless by flooding, the object of the Legislature would be defeated. He accordingly granted the injunction as asked.

Mr. Upjohn, K.C., and Mr. Waggett appeared for the plaintiffs; and Mr. Butcher, K.C., and Mr. Northcote for the defendants.

POINT UNDER THE METROPOLIS MANAGEMENT ACT.

MR. JUSTICE CHANNELL, in the King's Bench Division on the 19th inst., delivered judgment in the case of Heaver's Executors *v.* the Mayor, etc., of Fulham.

In this case the plaintiffs brought the action for an injunction to restrain the defendants from entering No. 29, Rosebery-road, Fulham, and in any way interfering with the drains and sewers in the premises for the purpose of converting them into a drain or sewer. The plaintiffs also asked for a declaration that the drain on their premises was a sewer within the Metropolis Management Act.

The facts giving rise to the action were shortly as follows:—In February, 1903, the plaintiffs were served by the defendants with a notice requiring them to abate a nuisance arising from a drain on the premises in question. A question then arose as to whether the drain was a sewer, and, as the County Council declined to decide the question, the defendants, for the purpose of getting the question decided, served the plaintiffs with a notice under section 53 of the Metropolis Management Act requiring them to disconnect the drain of No. 27 from the drain of No. 29 Rosebery-road. The plaintiffs then brought the present action, alleging that, as the drain carried the drainage of the two houses, it was a sewer, which was repairable by the defendants. The plaintiffs also contended that the drain was a sewer on the further ground that it carried the rain water from the roof of another house in the same road.

His Lordship, in the course of delivering a lengthy judgment, said he thought on the facts that the drain in question was a combined drainage done under the sanction of the Vestry, and on that ground he came to the conclusion that the drain was not a sewer. He said there was no necessity for him to deal with the question of the water gully, as there was no evidence that the drain was out of repair beyond the point where the gully carrying off the water from the roof of No. 31 joined the drain of No. 29. He did not intend to make any declaration with regard to the drain beyond the point of the connexion with that gully. He would, however, have hesitated a long time before deciding that because a rain-water gully carried away the rain water from the roofs of two houses that gully became a sewer. With regard to the service by the defendants of a notice under section 83 of the Act, he thought the defendants were wrong in so doing, as that section only applied to the service of the notice on the wrongdoer himself, in this case the late Mr. A. Heaver (the owner and builder). The plaintiffs would have been entitled to a declaration on that point, but as the proceedings had been taken mainly for the purpose of deciding whether or not the drain was a sewer, the defendants had succeeded on the main question. He, therefore, made a declaration that the structure down to the point where the water gully came in was not a sewer, and that the notice of July 31 was a bad notice. The defendants would have the costs of the action, but they must pay the plaintiffs the costs of having obtained an interlocutory injunction.

Order accordingly.

A stay of execution was granted with the view to an appeal.

Mr. Boxall, K.C., and Mr. Mayer appeared for the plaintiffs; and Mr. Danckwerts, K.C., and Mr. Courthorpe Munroe for the defendants.

PATENTS OF THE WEEK.

APPLICATIONS PUBLISHED.*

4,038 of 1903.—B. J. B. MILLS (A. Seigle): *Artificial Building Materials.*

A process for the manufacture of artificial stones, or the like, in which the mixture, composed of silicious sand, lime, or other analogous

* All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

materials is finally petrified by steam under pressure, such process being characterised by a preliminary and careful mixing of the sand and lime with a solution of chloride of calcium and of oxide of zinc; that is to say, capable of insuring, without artificial heating, the formation of an oxichloride of suitable composition, containing essentially calcium and zinc.

4,224 of 1903.—G. DEVENISH: *A Raft.*

A raft, consisting of a folding platform of strips of wood with notches and concentric edges, mounted on a central rod and held together thereby in conjunction with rods, guards, and floats, with runners and a keel, having at its ends a propeller, with its motor steering-gear fixed to its upper edge seat.

4,812 of 1903.—H. S. PALMER: *Machines for Moulding Hollow Concrete Building Blocks.*

The object of this invention is to provide a machine for the manufacture of building blocks from concrete and similar mixtures. The main frame comprises standards and a bed-plate, the latter having an elongated opening to permit adjustment of the cores. On the sides of the bed-plate are pairs of lugs pivoted to lugs carried by swinging side-plates. The ends of the bed-plate carry lugs pivoted to removable end-plates, one of the latter being arranged so that its pivot pintles may be removed to adjust the plate in position or to substitute a larger plate for the manufacture of corner blocks.

7,729 of 1903.—J. E. VARLEY and J. WILBY: *Means for Securing Sash Lines or Cords to Window Sashes or Sliding Frames.*

A sash line or cord fastening adapted to be readily attached to or disconnected from the sash stile, comprising a socket or cylinder having a contracted opening at its upper end, and screw threaded internally to receive a screwed plug or stud, or screw threaded externally to receive a screwed cap or sleeve having a contracted opening at its upper end.

8,934 of 1903.—A BROWN: *Dust, Draught, and Rain Excluder for Doors.*

This invention relates to a dust, draught, and rain excluder for doors. In carrying out the invention a strip or framing of metal or wood is attached to the door, at the bottom thereof, running across the width of the door; the lower edge of the said strip or framing being provided with a strip of rubber. The framing is prevented from moving laterally by means of screws fastened through the said framing to the door, but the framing may move vertically by an arrangement of vertical slots. Connected to the framing, at each end thereof, are two bell-crank levers, the lower ends of which are connected to the framing and the upper ends to a rod which works within guides on the door. One end of the said rod is connected by means of a pin to a lever, which is caused to abut against a screw fastened in the side of the frame of the door, so that, when the door is closed, the said screw forces the rod to move laterally, which has the effect of forcing the rubber strip down to the flooring, thereby closing any gap between the flooring and the bottom of the door. In order to bring the rod before referred to back again to its normal position, a spiral or other spring is preferably mounted on the rod.

9,036 of 1903.—J. MONK: *Shelters, Kiosks, and the like.*

This relates to shelters, kiosks, and the like which contain, or may be provided with, seats, and their main objects are to enable a great seating accommodation to be obtained upon any given floor or ground area and to provide a great amount of shelter against winds and storms. In carrying the invention into effect the shelter, or kiosk, is formed with three or more partitions, walls, or equivalents, which extend from the centre or from about the centre of the shelter to its outer edge or edges, or nearer to or in the direction of the outer edge or edges. These partitions may be regularly disposed, and have seats arranged along either one or both sides of each or any or all of them, as well as between the nearer ends of adjacent partitions if desired.

9,178 of 1903.—H. BROCKLESBY and S. GRATRIX, JUN., and BROTHER, LTD.: *Flushing Cisterns for Water-closets and the like.*

This consists in the combination, with flushing cisterns for water-closets and the like, of a cylinder, a loose-fitting piston within such cylinder, a non-return valve within the piston, and the said piston so connected to the cistern-outlet valve as to be moved to the opposite end of the cylinder when such valve is raised, and gradually return to its original position, the rate of return being such that the outlet valve comes to its seating before the cistern is fully drained.

9,384 of 1903.—C. J. FOOKS: *Casement Stays for Windows.*

According to this invention a long perforated metallic stay is loosely hinged or pivoted at one end on a counter-sunk back-plate, and at the other end of the said perforated stay a handle is formed. This said end, when the window is closed, falls into a square opening or socket cut in a projecting plate screwed to the bottom rail of the window. It also falls into a square opening or recess formed in a metallic projecting block which is screwed on to the side of the window frame.

24,744 of 1903.—C. F. HILKIER: *Thermometric Devices particularly adapted for Giving an Alarm in case of Fire or of a Sudden Increase in Temperature.*

A thermometer for indicating a sudden increase of temperature, characterised by a U-shaped tube sealed at both ends, the branches of the said tube being partially filled with mercury, above which is placed some volatile liquid, one branch being insulated from radiant heat, while the other is adapted to be acted upon directly by such heat.

25,078 of 1903.—O. M. EDWARDS: *Windows.*

A window, consisting in the combination of a guide-way, a sash adapted to move in the guide-way, holding devices adapted to bear against the sash at different points, one of which is provided with a movable part having a bevelled bearing surface and actuating means therefor, and a co-acting portion arranged substantially in the direction the sash moves, with which such movable part may frictionally bear, whereby the sash may be released from the holding action of such movable part when the actuating means are actuated in one direction.

25,769 of 1903.—A. MCGOWAN DENHAM: *Stoves.*

A stove, consisting in the combination of a heating and radiating surface forming the body of the stove, a reservoir for containing water located above said body, an illuminant placed between said body and said reservoir to generate heat in the latter, and means for conveying said heat to said body and for supporting said reservoir.

26,506 of 1903.—M. E. BLACKWOOD: *Coverings for Fireplaces for Use whilst Sweeping Chimneys.*

This invention relates to coverings for fireplaces for use whilst sweeping chimneys, and consists of a frame which is made in three parts so as to form three sides of a square, and joined together with hinges so as to be easily folded up. The frame may be made of strips of wood, or iron, or other suitable material, and is so made that it will expand in length and width, which is done by having slots in the strips, and connected by means of small iron bolts and thumb-nuts. By this means it is made to fit any fireplace. The frame is then covered with a sheeting of cotton or any similar fabric, and preferably of a black colour.

28,513 of 1903.—O. CHRISTIANSEN: *Cowl for Flues, Pipes, or Chimneys.*

Draught pipes and chimneys, characterised by the arrangement of an upper rotatable cowl and a number of channels at the lower part of the pipe or chimney-top projecting above the roof, which channels ascend at a slope from without and end in the interior of the pipe or chimney-top in order to prevent down-strokes of wind and to produce an effective draught in the pipe or chimney.

1,418 of 1904.—C. W. TREWEEK: *Flushing Tanks or Cisterns.*

Flushing tanks or cisterns, consisting of a reservoir formed at one end of the same and fitted with a valve operated by the ball-valve lever for permitting an inrush of the water from the tank to the reservoir, which water, acting upon the ball in the latter, quickly closes the ball valve.

1,580 of 1904.—H. HALL: *A Facing Tile.*

This invention has for its object a facing tile which is so formed that, when a number of them are fixed to a wall or other support, they shall leave a regular or uniform space around and between their front edges to enable a cement joint to be made between them. They are also provided with distance pieces of such a form on the face of one or the other of their overlapping parts that such distance pieces shall cut through the mortar or cement used in fixing the tiles, thereby enabling the latter to be readily fixed in a uniform plane. The back of the tile has recesses formed therein, between which the ribs of V-shaped cross section, the apices of which are on or about a level with the back face of the tile, and elongated holes are formed through the flange to enable nails, when required, to be passed therethrough at such positions as will enable the nails to obtain a good hold.

1,858 of 1904.—H. SMITH: *Adjustable Hinges for Doors, applicable to Buildings, Gates, Railway Carriages, and the like.*

This invention relates to adjustable hinges for doors. In carrying the invention into practice a flat metallic plate is constructed, and on each side a pivot-pin is fixed, and at convenient positions holes are drilled and tapped. In each corner is a counter-sunk screw-hole for fixing the plate by means of counter-sunk screws to any woodwork or to any other material. To the pins links or bars are secured. The ends of the said links or bars are attached to pivot-pins fixed to the front of a hinge, all loosely pivoted. The front of the hinge is provided with two longitudinal slots and at its end with the usual knuckle-joint and strap. The front of the hinge is adjusted to the plate by means of bolts (through the slots) being screwed into the holes.

7,637 of 1903.—W. H. OSBORN: *Fire Chamber of a Domestic Fire Grate or the like.*

A renewable fire-brick or like slab or block internally formed hollow, for use within the fire chamber of a domestic grate, or with a number of communicating air passages proceeding from an opening in the underside of the said block or slab, and discharging into exit holes which are sufficiently high up in the block or slab to lead over the top of or into the fire in the fire chamber.

8,862 of 1903.—J. TILLEY: *Machinery for Boring and Dowelling Wood Blocks for Flooring and like purposes.*

Machinery for boring and dowelling wood blocks for flooring and like purposes, characterised by four boring tools mounted to slide upon a bed and actuated by a cam movement in combination with a feed through the bed and a cam-lifted rod for raising the blocks ready for boring and at the same time removing the previous block.

9,707 of 1903.—W. D. CAT: *Construction of Piers, Breakwaters, and other structures.*

According to this invention piers, breakwaters, and other structures are constructed of blocks by rolling them into position. For this purpose the blocks are made of cylindrical or other form, such that they can be rolled from place to place, or they have fixed to or formed upon them suitable surfaces to support them whilst being rolled. The ends of the block may have trunnions fixed in them to facilitate handling and for securing them either temporarily or permanently.

26,751 of 1903.—W. MORRIS: *Brick Kilns.*

Brick kilns, the building of all flues practically on one level, consisting in the arrangement by which the hot products of combustion from a previous kiln pass directly into the one side of the juxta kiln, pass up the ashes holes, fire holes, and fire bags on that side only, being exhausted on the opposite side of said kiln through louvres in a steam flue running the length of the kiln, together with the special arrangement and construction of damper slides in the flues and the special use of dampers in conjunction with the said ashes holes.

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

March 14.—By BEALE & CAPPS.

Notting Hill.—2, Silchester-rd. (s.), u.t. 37¼ yrs., g.r. 10*l.*, e.r. 55*l.*	£380
35, Lansdowne-rd., u.t. 38¼ yrs., g.r., etc., 17*l.* 2*s.*, y.r. 70*l.*	550

By FULLER, MOON, & FULLER.

Kenley, Surrey.—"The Firs" and 1 acre, f., e.r. 100*l.*	1,680

By KEMSLEYS'.

Woodford.—5, Derby-villas, f., e.r. 25*l.*	315
Romford, Essex.—Market-pl., the "Pig in the Pound" b.h., and two cottages adjoining, f., y.r. 74*l.* 4*s.*	900
Walthamstow.—Chingford-rd., "High House," f., y.r. 30*l.*	920

By WEATHERALL & GREEN.

Bloomsbury.—Endell-st., f.g.r. 100*l.*, reversion in 13¼ yrs.	4,250
Soho.—35 to 49 (odd), Shaftesbury-av.; 57 to 75 (odd), Wardour-st.; 25 to 31, Rupert-st.; 7 to 11, Upper Rupert-st., area 23,406 ft., building lease for 80 yrs., let at per ann.	7,300

By BALCH & BALCH (at Camden Town).

Kentish Town.—12, Gaisford-st., u.t. 44 yrs., g.r. 8*l.*, y.r. 50*l.*	515

March 15.—By C. H. BROWN.

Pimlico.—5, Winchester-st., u.t. 24 yrs., g.r. 9*l.*, y.r. 65*l.*	450
6, Moreton-pl., u.t. 25½ yrs., g.r. 8*l.*, y.r. 50*l.*	400

By DAVID BURNETT & CO.

Hounslow.—34 and 40, Bulstrode-rd., f., y.r. 95*l.*	1,300

By FREDERICK WARMAN.

West Kensington.—38, Comeragh-rd., u.t. 72 yrs., g.r. 10*l.*, e.r. 52*l.*	370
Hackney.—16 and 17, Andrews-rd., and 1a, Antwerp-st., u.t. 31½ yrs., g.r. 6*l.*, w.r. 83*l.* 4*s.*	330

53, Southborough-rd., u.t. 49¾ yrs., g.r. 5*l.*, y.r. 39*l.* £355
Mile End.—45 and 47, Devonshire-rd., u.t. 17¾ yrs., g.r. 4*l.*, w.r. 58*l.* 10*s.* 195
Leyton.—144 and 170, South Birkbeck-rd., f., w.r. 57*l.* 4*s.* 445

By E. FOX & BOUSFIELD, in conjunction with MONTAGU & ROBINSON.

City of London.—17½, Addle-st. (warehouse), area 790 ft., f., y.r. 395*l.* 4,000
62, Cannon-st., and 25, College-hill (shop and offices), area 1,228 ft., f., y.r. 630*l.* ..
19, 21, and 23, Ludgate-hill, and 1, Ludgate-sq., with "St. Paul's-chambers" (shops and offices), area 3,580 ft., u.t. 54 yrs., g.r. 633*l.*, y.r. 3,165*l.* 20,000
Kensington.—25 to 39 (odd), Church-st. (s.), f., y.r. 1,170*l.* 28,650
Shoreditch High-st.—No. 149A (workshops, factory, etc.), area 6,500 ft., f., y.r. 170*l.* , 2,800
Poplar.—1 and 2, Montague-pl., f., y.r. 80*l.* .. 1,300
3, Montague-pl. (factory, etc.), f., y.r. 80*l.*.. 1,300
Southwark.—132, Southwark-st. (warehouse), area 880 ft., f., y.r. 150*l.* 2,000

March 16.—By FRANCIS DOD & CO.

Wood Green.—1, 3, and 5, Lyndhurst-rd., f., w.r. 101*l.* 8*s.* 1,110
42, Palace-rd., f., e.r. 45*l.* 680
Palace-rd., a freehold building site 470
Tottenham.—38, Durham-rd., f., e.r. 28*l.* 360
Harringay.—138 and 140, Fairfax-rd., u.t. 85¼ yrs., g.r. 10*l.*, y.r. 56*l.* 430
Edmonton.—459 and 469, Fore-st. (s.), u.t. 72¼ yrs., g.r. 10*l.*, y.r. 85*l.* 1,000
Wood Green.—5 and 6, Byron-villas, u.t. 76 yrs., g.r. 14*l.*, y.r. 72*l.* 665

By FOSTER & CRANFIELD.

Plumstead, Kent.—31 and 43, Herbert-rd. (shop and livery stables), f., y.r. 120*l.* 10*s.* 2,100

By G. FUTVOYE FRANCIS.

Pimlico.—10, Rutland-st., u.t. 20¾ yrs., g.r. 8*l.*, y.r. 46*l.* 310

By HUMBERT & FLINT.

Soho.—17 and 18, Rupert-st. (s.), area 1,200 ft., f., y.r. 350*l.* 6,800
Hammersmith.—St. Paul's-cres., etc., f.g.r. 300*l.*, reversion in 93¼ yrs. 7,000
Wood Green.—Victoria-rd., f.g.r. 46*l.* 10*s.*, reversion in 94 yrs. 980

By RUSHWORTH & STEVENS.

Pall Mall.—Nos. 50, 50A, and 51, f.g. rents 120*l.*, reversion in 854 yrs. 3,520
Pall Mall-pl., f.g. rents 108*l.* 4*s.*, reversion in 854 yrs. 3,090

By WM. WESTON.

Paddington.—109 and 109A, Westbourne Park-rd. (s.), u.t. 52 yrs., g.r. 8*l.*, y.r. 90*l.* 900

By E. FOX & BOUSFIELD, in conjunction with MONTAGU & ROBINSON.

City of London.—89 and 90, Milton-st. (warehouses), area 1,380 ft., f., y.r. 325*l.* 4,825
51 and 53, Moor-la. (warehouse), area 1,230 ft., f., y.r. 300*l.* 3,750
Southwark.—136, Southwark-st. (warehouse), area 700 ft., f., y.r. 120*l.* 1,625
City of London.—24, Warwick-la. (warehouse), area 640 ft., u.t. 52¼ yrs., g.r. 110*l.*, y.r. 330*l.* 1,100
13, Garlick-hill, and 1, Sugar Loaf-ct. (factory), area 2,680 ft., u.t. 32¼ yrs., g.r. 82*l.*, y.r. 350*l.* 2,750
Marylebone.—54, Baker-st. (s.), u.t. 18 yrs., g.r. 100*l.*, y.r. 400*l.* 2,275
Oxford-street.—No. 362 (s.), Corporation lease, g.r. 3*l.*, y.r. 250*l.* 7,600
No. 364 ("The Clarendon" p.h.), Corporation lease, g.r. 3*l.*, y.r. 200*l.* 8,050
13, Stratford-pl., part freehold and part Corporation lease, g.r. 5*l.*, y.r. 200*l.* 7,000
Euston-road.—18, Endsleigh-st., u.t. 19½ yrs., g.r. 30*l.*, y.r. 110*l.* 650
Strand.—1, Southampton-st., and 1, Exeter-st. (s.), area 1,060 ft., u.t. 25½ yrs., g.r. 24*l.* 3*s.*, y.r. 270*l.* 3,025
2, Southampton-st., and 2, Exeter-st. (offices), area 1,080 ft., u.t. 25½ yrs., g.r. 24*l.* 3*s.*, y.r. 270*l.* 3,000
Finsbury.—1 and 3, Sun-st. (warehouse), area 1,470 ft., u.t. 59 yrs., g.r. 110*l.*, y.r. 450*l.* 4,000
39, Wilson-st. (warehouse), area 1,140 ft., u.t. 59 yrs., g.r. 83*l.* 14*s.*, y.r. 216*l.* 1,950
Maida Vale.—2 and 4, Randolph-cres., u.t. 62½ yrs., g.r. 42*l.*, y.r. 240*l.* 2,100
47 and 49, Warwick-road, u.t. 46¼ yrs., g.r. 40*l.*, y.r. 150*l.* 890

March 17.—By H. J. BLISS & SONS.

Bethnal Green.—51, Auckland-rd., f., w.r. 33*l.* 16*s.* 500
Bow.—50, Milton-rd., f., w.r. 36*l.* 8*s.* 450
Mile End.—107, Devonshire-street, w.r. 33*l.* 16*s.*, also l.g.r. 6*l.*, u.t. 27¼ yrs., g.r. 11*l.* 170

By W. J. GARDNER.

Gray's Inn-road.—31, Ampton-st., u.t. 10½ yrs., g.r. 7*l.*, y.r. 45*l.* 155
43, Frederick-st., u.t. 10½ yrs., g.r. 7*l.*, y.r. 52*l.* 10*s.* 160
Kennington.—23, Hanover-gdns., u.t. 41½ yrs., g.r. 4*l.*, e.r. 36*l.* 315

By PHIBBS, GIBSON, & CO.

Herne Hill.—49 and 51, Gubyon-av., u.t. 71 yrs., g.r. 18*l.*, e.r. 110*l.* 850

By NEWBON, EDWARDS, & SHEPHARD.

Hoxton.—8, Hoxton-sq. (warehouse), u.t. 63 yrs., g.r. 50*l.*, y.r. 170*l.* 1,100
Islington.—138, Liverpool-rd., f., y.r. 52*l.* 600
13, Dean-st., u.t. 23 yrs., g.r. 4*l.* 4*s.*, w.r. 55*l.* 18*s.* 200
Caledonian-road.—24, Market-rd., u.t. 49 yrs., g.r. 6*l.*, y.r. 36*l.* 355
Canonbury.—5 and 6, St. Mary's-rd., u.t. 41 yrs., g.r. 20*l.*, y.r. 110*l.* 995
Kentish Town.—6, Leighton-cres., u.t. 37 yrs., g.r. 8*l.* 10*s.*, y.r. 52*l.* 10*s.* 355
Fulham.—796 and 798, Fulham-rd. ("Vicarage Farm Dairy" and "Holcroft Laundry"), u.t. 81¼ yrs., g.r. 14*l.*, y.r. 65*l.* 980

By STIMSON & SONS.

Anerley.—174 and 176, Anerley-rd., also "Seymour Nursery," u.t. 26¼ yrs., g.r. 24*l.*, y.r. 144*l.* £620
Norwood.—Upper Beulah Hill, i.g.r. 44*l.*, u.t. 59 yrs. g.r. 1*l.* 690
Marylebone.—130 to 136 (even), Carlisle-st., u.t. 17¼ yrs., g.r. 16*l.*, w.r. 148*l.* 4*s.* 460
Croydon.—14 to 18, Fullerton-rd., u.t. 76 yrs., g.r. 20*l.*, e.r. 126*l.* 2*s.* 455
Shortlands, Kent.—55 to 61 (odd), Recreation-rd., u.t. 74½ yrs., g.r. 16*l.*, w.r. 78*l.* 425
Camberwell.—17, Graces-rd., u.t. 55 yrs., g.r. 5*l.* 10*s.*, y.r. 33*l.* 300

March 18.—By HOWELL, SON, & BONNIN.

South Kensington.—86, Earl's Court-rd., u.t. 50 yrs., g.r. 1*l.*, p. 4,025

By F. VARLEY & SON.

Finsbury Park.—293, Green-lanes, u.t. 53 yrs., g.r. 15*l.*, p. 1,500
37, Gloucester-rd., u.t. 56 yrs., g.r. 13*l.* 13*s.*, p. 820
Stoke Newington.—103, Bethune-rd., u.t. 86 yrs., g.r. 12*l.*, e.r. 75*l.* 810

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent; av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beer-house; p.h. for public-house; o. for offices; s. for shops; ct. for court.

MEETINGS.

FRIDAY, MARCH 25.

Institution of Civil Engineers (Students' Meeting).—Mr. J. M. Kennedy on "The Relative Advantages of Continuous and Alternating Current for Traction Purposes." 8 p.m.

Royal Institution.—Professor Dewar on "Liquid Hydrogen Calorimetry." 9 p.m.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. J. E. Worth on "Sewage Disposal." 7 p.m.

Glasgow Architectural Craftsmen's Society.—Mr. W. H. Baxter on "Some Woodworking Tools and their Economic Working." 8 p.m.

SATURDAY, MARCH 26.

Sanitary Institute (Sessional Meeting).—Mr. W. E. Riley, Architect to the L.C.C., on "Municipal Re-Housing." 11 a.m. Visit in the afternoon to L.C.C. Bourne Estate, Clerkenwell-road, and Cottage Estate, Tottenham.

Royal Institution.—Right Hon. Lord Rayleigh, M.A., on "The Life and Work of Stokes," VI. 3 p.m.

Sanitary Institute (Demonstrations for Sanitary Officers).—Inspection at the Sewage Outfall Works, Barking. 3 p.m.

Edinburgh Architectural Association.—Visit to Gothic Ironworks, Falkirk.

Builders' Foremen's Association (Memorial Hall, Farringdon-street).—Mr. E. Willis on "Drainage, with the Practical Use of the Surveyor's Level." 8.30 p.m.

MONDAY, MARCH 28.

The Royal Institute of British Architects.—Mr. C. Stanley Peach on "The Design and Construction of Buildings Connected with the Generation and Supply of Electricity known as Central Stations," with Lantern Illustrations, and Working and Detail Drawings. 8 p.m.

Regent-street Polytechnic (University Extension Lectures).—Professor Vivian Lewes on "The Chemistry of Air, Fire, and Water," IX. 8 p.m.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. J. E. Worth on "Scavenging, Disposal of House Refuse." 7 p.m.

Builders' Benevolent Institution.—Committee Meeting. 5 p.m.

TUESDAY, MARCH 29.

Institution of Civil Engineers.—(1) Mr. L. H. Savile on "Lowering the Sill of the Ramsden Dock, Barrow-in-Furness"; and (2) Mr. R. Henderson on "Burntisland Harbour: Construction of the East Dock." 8 p.m.

WEDNESDAY, MARCH 30.

Architectural Association Discussion Section.—Mr. G. P. Bankart on "Leadwork." 7.30 p.m.

Sanitary Institute (Demonstrations for Sanitary Officers).—Inspection of a house in Stoke Newington. 3 p.m.

Edinburgh Architectural Association.—Mr. T. Ross, F.S.A., Scot., on "The Remains and Evidences of Roman Architecture in Scotland." 8 p.m.

TO CORRESPONDENTS.

R. C. C.—H. S. (Amounts should have been stated).

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*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and Quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

	£ s. d.	
Hard Stocks.	1 16 0	per 1000 alongside, in river.
Rough Stocks and Grizzles	1 13 0	,, ,, ,,
Facing Stocks ...	2 12 0	,, ,, ,,
Shippers	2 10 0	,, ,, ,,
Flettons	1 10 0	,, ,, ,, at railway depôt.
Red Wire Cuts ...	1 13 0	,, ,, ,,
Best Fareham Red	3 12 0	,, ,, ,,
Best Red Pressed Ruabon Facing	5 0 0	,, ,, ,,
Best Blue Pressed Staffordshire ...	4 4 0	,, ,, ,,
Do. Bullnose	4 10 0	,, ,, ,,
Best Stourbridge Fire Bricks	4 8 0	,, ,, ,,
GLAZED BRICKS.		
Best White and Ivory Glazed Stretchers	13 0 0	,, ,, ,,
Headers	12 0 0	,, ,, ,,
Quoins, Bullnose, and Flats.....	17 0 0	,, ,, ,,
Double Stretchers	19 0 0	,, ,, ,,
Double Headers...	16 0 0	,, ,, ,,
One Side and two Ends	19 0 0	,, ,, ,,
Two Sides and one End	20 0 0	,, ,, ,,
Splays, Chamferred, Squints.	20 0 0	,, ,, ,,
Best Dipped Salt Glazed Stretchers, and Header	12 0 0	,, ,, ,,
Quoins, Bullnose, and Flats.....	14 0 0	,, ,, ,,
Double Stretchers	15 0 0	,, ,, ,,
Double Headers...	14 0 0	,, ,, ,,
One Side and two Ends	15 0 0	,, ,, ,,
Two Sides and one End	15 0 0	,, ,, ,,
Splays, Chamferred, Squints	14 0 0	,, ,, ,,
Second Quality, White and Dipped Salt Glazed	2 0 0	,, less than best.

	s. d.	
Thames and Pit Sand.....	7 3	per yard, delivered.
Thames Ballast.....	6 0	,, ,,
Best Portland Cement	30 0	per ton, ,,
Best Ground Blue Lias Lime	21 0	,, ,,

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime.....12*s.* 0*d.* per yard, delivered.
Stourbridge Fireclay in sacks 27*s.* 6*d.* per ton at rly. dpt.

STONE.

	s. d.	
BATH STONE—delivered on road waggons, Paddington Depôt	1 6½	per ft. cube.
Do. do. delivered on road waggons, Nine Elms Depôt	1 8½	,, ,,
PORTLAND STONE (20 ft. average)—		
Brown Whitbed, delivered on road waggons, Paddington depôt, Nine Elms depôt, or Pimlico Wharf...	2 1	,, ,,
White Basebed, delivered on road waggons, Paddington depôt, Nine Elms depôt, or Pimlico Wharf...	2 2½	,, ,,

	s. d.	
Ancester in blocks	1 11	per ft. cube, deld. rly. depôt.
Beer ,, ...	1 6	,, ,,
Greenshill ,, ...	1 10	,, ,,
Darley Dale in blocks...	2 4	,, ,,
Red Corsehill ,,	2 5	,, ,,
CloseburnRedFreestone	2 0	,, ,,
Red Mansfield ,,	2 4	,, ,,

YORK STONE—*Robin Hood Quality.*

	s. d.	
Scappled random blocks	2 10	per ft. cube, deld. rly. depôt.
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 3	per foot super. ,,
6 in. rubbed two sides ditto, ditto	2 6	,, ,,
3 in. sawn two sides slabs (random sizes)	0 11½	,, ,,
2 in. to 2½ in. sawn one side slabs (random sizes)	0 7½	,, ,,
1½ in. to 2 in. ditto, ditto	0 6	,, ,,
HARD YORK—		
Scappled random blocks	3 0	per ft. cube ,,
6 in. sawn two sides, landings to sizes (under 40 ft. super.)	2 8	per ft. super. ,,
6 in. rubbed two sides Ditto	3 0	,, ,,
3 in. sawn two sides (slabs random sizes)	1 2	,, ,,
2 in. self-faced random flags	0 5	,, ,,
Hopton Wood (Hard Bed) in blocks	2 3	per ft. cube.
,, ,, ,, 6 in. sawn both sides landings	2 7	deld. rly. depôt per ft. super. deld. rly. depôt
,, ,, ,, 3 in. do.	1 2½	,, ,,

SLATES.

in. in.	£ s. d.	
20 × 10 best blue Bangor	13 2 6	per 1000 of 1200 at r. d.
20 × 12 ,, ,,	13 17 6	,, ,,
20 × 10 best seconds ,,	12 15 0	,, ,,
20 × 12 ,, ,, ,,	13 10 0	,, ,,
16 × 8 ,, ,, ,,	7 0 0	,, ,,
20 × 10 best blue Portmadoc	12 12 6	,, ,,
16 × 8 best blue Portmadoc	6 12 6	,, ,,

SLATES—(*continued*).

20 x 10 best Eureka unfading green .	15	2	6	Per 1000 of 1200 at r. d.	
20 x 12 " "	17	2	6	"	"
18 x 10 " "	12	10	0	"	"
16 x 8 " "	10	5	0	"	"
20 x 10 permanent green	11	10	0	"	"
18 x 10 " "	9	10	0	"	"
16 x 8 " "	6	10	0	"	"

TILES.

	s.	d.	
Best plain red roofing tiles .	42	0	per 1000 at rly. depôt.
Hip and Valley tiles ...	3	7	per doz. " "
Best Broseley tiles	50	0	per 1000 " "
Do. Ornamental tiles	52	6	" " "
Hip and Valley tiles ...	4	0	per doz. " "
Best Ruabon red, brown, or brindled do. (Edwards)	57	6	per 1000 " "
Do. Ornamental do	60	0	" " "
Hip tiles	4	0	per doz. " "
Valley tiles	3	0	" " "
Best Red or Mottled Staffordshire do. (Peakes)	51	9	per 1000 " "
Do. Ornamental do.	54	6	" " "
Hip tiles	4	1	per doz. " "
Valley tiles	3	8	" " "
Best "Rosemary" brand plain tiles	48	0	per 1000 " "
Best Ornamental tiles	50	0	" " "
Hip tiles	4	0	per doz. " "
Valley tiles	3	8	" " "
Best "Hartshill" brand plain tiles, sand faced.	50	0	per 1000 " "
Do. pressed	47	6	" " "
Do. Ornamental do	50	0	" " "
Hip tiles	4	0	per doz. " "
Valley tiles	3	6	" " "

WOOD.

	£	s.	d.	At per standard. £	s.	d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in	15	10	0	16	10	0
Deals: best 3 by 4	14	10	0	15	10	0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	11	10	0	12	10	0
Battens: best 2½ by 6 and 3 by 6 ..	0	10	0	less than 7 in. and 8 in.		
Deals: seconds	1	0	0	less than best		
Battens: seconds	0	10	0	" " "		
2 in. by 4 in. and 2 in. by 6 in.	9	0	0	9	10	0
2 in. by 4½ in. and 2 in. by 5 in.	8	10	0	9	10	0
Foreign Sawn Boards— 1 in. and 1¼ in. by 7 in.	0	10	0	more than battens.		
¾ in.	1	0	0	"		
Fir timber: best middling Danzig or Memel (average specification)	At per load of 50 ft. 4	10	0	5	0	0
Seconds	4	5	0	4	10	0
Small timber (8 in. to 10 in.)	3	12	6	3	15	0
Small timber (6 in. to 8 in.)	3	0	0	3	10	0
Swedish balks	2	15	0	3	0	0
Pitch-pine timber (30 ft. average)	3	5	0	3	15	0

JOINERS' WOOD.

	£	s.	d.	At per standard. £	s.	d.
White Sea: first yellow deals, 3 in. by 11 in	23	0	0	24	0	0
3 in. by 9 in.	21	0	0	22	10	0
Battens, 2½ in. and 3 in. by 7 in.	17	0	0	18	10	0
Second yellow deals, 3 in. by 11 in	18	10	0	20	0	0
" " 3 in. by 9 in.	17	10	0	19	0	0
Battens, 2½ in. and 3 in. by 7 in.	13	10	0	14	10	0
Third yellow deals, 3 in. by 11 in. and 9 in.	15	10	0	16	10	0
Battens, 2½ in. and 3 in. by 7 in.	11	10	0	12	10	0
Petersburg: first yellow deals, 3 in. by 11 in.	21	0	0	22	10	0
Do. 3 in. by 9 in.	18	0	0	19	10	0
Battens	13	10	0	15	0	0
Petersburg: second yellow deals, 3 in. by 11 in.	16	0	0	17	0	0
Do. 3 in. by 9 in.	14	10	0	16	0	0
Battens	11	0	0	12	10	0
Third yellow deals, 3 in. by 11 in.	13	10	0	14	0	0
Do. 3 in. by 9 in.	13	0	0	14	0	0
Battens	10	0	0	11	0	0
White Sea and Petersburg:—						
First white deals, 3 in. by 11 in.	14	10	0	15	10	0
" " 3 in. by 9 in.	13	10	0	14	10	0
Battens	11	0	0	12	0	0
Second white deals, 3 in. by 11 in.	13	10	0	14	10	0
" " 3 in. by 9 in.	12	10	0	13	10	0
" " battens	9	10	0	10	10	0
Pitch-pine: deals	16	10	0	20	0	0
Under 2 in. thick extra	0	10	0	1	0	0
Yellow Pine—First, regular sizes	35	0	0	upwards.		
Oddments	24	0	0	26	0	0
Seconds, regular sizes	26	10	0	28	10	0
Yellow Pine oddments	22	0	0	24	0	0
Kauri Pine—Planks, per ft. cube .	0	3	6	0	5	0
Danzig and Stettin Oak Logs— Large, per ft. cube	0	2	6	0	3	6
Small " "	0	2	3	0	2	6
Wainscot Oak Logs, per ft. cube.	0	5	0	0	5	6
Dry Wainscot Oak, per ft. sup. as inch	0	0	7	0	0	8
¾ in. do. do.	0	0	6½	—		
Dry Mahogany—Honduras, Tabasco, per ft. super. as inch	0	0	9	0	0	11
Selected, Figury, per ft. sup. as inch	0	1	6	0	2	0
Dry Walnut, American, per ft. sup. as inch	0	0	10	0	1	0
Teak, per load	17	0	0	21	0	0
American Whitewood Planks— per ft. cube	0	4	0	—		
Prepared Flooring—	Per square.					
1 in. by 7 in. yellow, planed and shot	0	13	6	0	17	6
1 in. by 7 in. yellow, planed and matched	0	14	0	0	18	0
1¼ in. by 7 in. yellow, planed and matched	0	16	0	1	0	0
1 in. by 7 in. white, planed and shot	0	12	0	0	14	6
1 in. by 7 in. white, planed and matched	0	12	6	0	15	0
1¼ in. by 7 in. white, planed and matched	0	15	0	0	16	6

WOOD—(*continued*)—

	Per square.					
¾ in. by 7 in. yellow, matched and beaded or V-jointed brds.	0	11	0	0	13	6
¾ in. by 7 in. do. do. do.	0	14	0	0	18	0
1 in. by 7 in. white do. do.	0	10	0	0	11	6
1 in. by 7 in. do. do. do.	0	11	6	0	13	6

6 in. at 6d. to 9d. per square less than 7 in.

JOISTS, GIRDERS, &c.

	In London, £	s.	d.	or delivered Railway Vans, per ton. £	s.	d.
Rolled Steel Joists, ordinary sections	6	5	0	7	5	0
Compound Girders, ordinary sections	8	2	6	9	5	0
Angles, Tees and Channels, ordinary sections	7	17	6	8	17	6
Flitch Plates	8	5	0	8	15	0
Cast Iron Columns and Stanchions including ordinary patterns	7	2	6	8	5	6

METALS.

	Per ton, in London. £	s.	d.	£	s.	d.
IRON— Common Bars	7	5	0	7	15	0
Staffordshire Crown Bars, good merchant quality	7	15	0	8	5	0
Staffordshire "Marked Bars"	10	0	0	—		
Mild Steel Bars	8	15	0	9	5	0
Hoop Iron, basis price	9	5	0	9	10	0
" " Galvanized	17	10	0	—		
("And upwards, according to size and gauge.)						
Sheet Iron (Black)— Ordinary sizes to 20 g.	9	15	0	—		
" " 24 g.	10	15	0	—		
" " 26 g.	12	5	0	—		
Sheet Iron, Galvanised, flat, ordinary quality— Ordinary sizes—6 ft. by 2 ft. to 3 ft. to 20 g.	12	15	0	—		
Ordinary sizes to 22 g. and 24 g.	13	5	0	—		
" " 26 g.	14	5	0	—		
Sheet Iron, Galvanised, flat, best quality— Ordinary sizes to 20 g.	16	0	0	—		
" " 22 g. and 24 g.	16	10	0	—		
" " 26 g.	18	0	0	—		
Galvanised Corrugated Sheets— Ordinary sizes 6 ft. to 8 ft. 20 g.	12	10	0	—		
" " 22 g. and 24 g.	13	0	0	—		
" " 26 g.	13	15	0	—		
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker	11	15	0	—		
Best Soft Steel Sheets, 22 g. & 24 g.	12	15	0	—		
" " " 26 g.	14	0	0	—		
Cut nails, 3 in. to 6 in.	9	0	0	9	10	0
(Under 3 in., usual trade extras.)						

LEAD, &c.

	Per ton, in London £	s.	d.	£	s.	d.
LEAD—Sheet, English, 3lb. and up	14	15	0	—		
Pipe in coils	15	5	0	—		
Soil pipe	17	15	0	—		
Compo pipe	17	15	0	—		
ZINC—Sheet— Vieille Montagne ton	26	5	0	—		
Silesian	26	0	0	—		
COPPER— Strong Sheet per lb.	0	0	10½	—		
Thin " "	0	0	11½	—		
Copper nails "	0	0	11	—		
BRASS— Strong Sheet per lb.	0	0	10	—		
Thin "	0	0	11	—		
TIN—English Ingots "	0	1	4	—		
SOLDER—Plumbers' "	0	0	6½	—		
Tinmen's "	0	0	8	—		
Blowpipe "	0	0	9	—		

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	2d. per ft.	delivered.
" fourths	1½d.	" "
21 oz. thirds	3d.	" "
" fourths	2½d.	" "
26 oz. thirds	3½d.	" "
" fourths	3d.	" "
32 oz. thirds	4½d.	" "
" fourths	4d.	" "
Fluted Sheet, 15 oz.	2½d.	" "
" 21 oz.	3½d.	" "
⅛ Hartley's Rolled Plate	1½d.	" "
¼ " " "	1½d.	" "
½ " " "	2½d.	" "

OILS, &c.

		£	s.	d.
Raw Linseed Oil in pipes or barrels .	per gallon	0	1	6
" " " in drums	"	0	1	9
Boiled " " in pipes or barrels .	"	0	1	9
" " " in drums	"	0	2	0
Turpentine, in barrels	"	0	3	8
" in drums	"	0	3	10
Genuine Ground English White Lead	per ton	19	0	0
Red Lead, Dry	"	19	0	0
Best Linseed Oil Putty	per cwt.	0	7	6
Stockholm Tar	per barrel	1	12	0

VARNISHES, &c.

	Per gallon. £	s.	d.
Fine Pale Oak Varnish	0	8	0
Pale Copal Oak	0	10	6
Superfine Pale Elastic Oak	0	12	6
Fine Extra Hard Church Oak	0	10	0
Superfine Hard-drying Oak, for seats of Churches	0	14	0
Fine Elastic Carriage	0	12	6
Superfine Pale Elastic Carriage	0	16	0
Fine Pale Maple	0	16	0
Finest Pale Durable Copal	0	18	0
Extra Pale French Oil	1	1	0
Eggshell Flatting Varnish	0	18	0
White Copal Enamel	1	4	0
Extra Pale Paper	0	12	0
Best Japan Gold Size	0	10	6
Best Black Japan	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	6
Berlin Black	0	16	0
Knotting	0	10	0
French and Brush Polish	0	10	0

TERMS OF SUBSCRIPTION.

"THE BUILDER" (Published Weekly) is supplied DIRECT from the Office to residents in any part of the United Kingdom at the rate of 19s. per annum (52 numbers) PREPAID. To all parts of Europe, America, Australia, New Zealand, India, China, Ceylon, &c., 26s. per annum. Remittances (payable to J. MORGAN) should be addressed to the Publisher of "THE BUILDER," Catherine-street, W.C.

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PUBLISHER'S NOTICES.

Nat. Tel., 6112, Gerrard. Telegrams, "The Builder, London."

THE INDEX (with TITLE-PAGE) for VOLUME LXXXV. (July to December, 1903) was given as a supplement with issue of January 9 last.

CLOTH CASES for Binding the Numbers are now ready, price 2s. 6d. each; also

READING CASES (Cloth), with Strings, price 9d. each.

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*** Stamps *must not* be sent, but all sums should be remitted by Postal Orders, payable to J. MORGAN, and addressed to the Publisher of "THE BUILDER," Catherine Street, W.C.

Advertisements for the current week's issue are received up to THREE o'clock p.m. on THURSDAY, but "Classification" is impossible in the case of any which may reach the Office after HALF-PAST ONE p.m. on that day. Those intended for the Outside Wrapper should be in by TWELVE noon on WEDNESDAY.

ALTERATIONS IN STANDING ADVERTISEMENTS or ORDERS TO DISCONTINUE same must reach the Office before TEN o'clock on WEDNESDAY MORNING.

The Publisher cannot be responsible for DRAWINGS, TESTIMONIALS, &c., left at the Office in reply to advertisements, and strongly recommends that of the latter COPIES ONLY should be sent.

PERSONS advertising in "THE BUILDER" may have *Replies addressed to the Office*, Catherine Street, Covent Garden, W.C., *free of charge*. Letters will be forwarded if addressed envelopes are sent, together with sufficient stamps to cover the postage. Unused stamps are returned to advertisers the week after publication.

AN EDITION Printed on THIN PAPER, for FOREIGN and COLONIAL CIRCULATION, is issued every week.

READING CASES { NINEPENCE EACH. By post (carefully packed) 1s.

TENDERS.

*** Next week communications for insertion under this heading must reach us *not later than* 10 *a.m.* on Wednesday, as, owing to the Easter holidays, we go to press a day earlier than usual.

* Denotes *accepted*. † Denotes *provisionally accepted*.

AUDENSHAW.—For the erection of six dwelling-houses at Corporation-road, Audenshaw. Messrs. J. H. Burton and J. A. Percivals, architects, 150A, Stamford-street, Ashton-under-Lyne.

General Trades.

Z. Pike & Son, Hooley Hill* £1,277 12 0
(Nineteen tenders received.)

Plumbing and Glazing.

S. Morris, Denton* £144 2 0

BENGEO (Hertford).—For road works, for Mr. W. F. Parker. Messrs. Norris & Duvall, Surveyors, 60, Fore-street, Hertford:—

Smyth, White, & Co.	£3,106 4 3	R. Ballard, Ltd.	£2,371 0 0
W. A. Sparrow	2,915 15 0	G. Bell	2,162 0 0
E. Bloomfield	2,787 18 3	H. W. Catchpole & Co.	2,140 16 3
W. Griffiths & Co., Ltd.	2,734 8 4	W. H. Henshaw	2,075 10 5
A. T. Catley	2,526 0 0	T. Adams	2,042 15 7
Killingback & Co.	2,404 18 5	J. C. Trueman	1,899 0 0
Wallace & Inns	2,387 1 6	G. F. Tomlinson	1,735 0 0

BEXLEY HEATH (KENT).—Accepted for the supply of granite, flints, ragstone, and best glazed stoneware pipes, etc., for the Urban District Council. Mr. W. T. Howse, Surveyor, Council Offices, Bexley Heath:—

	Per ton. s.	d.
Granite.		
C. M. Manuelle, London	13	5
Quartzite.		
Road Maintenance and Stone Supply Co., Gravesend	11	1
Ragstone Riddlings.		
W. H. Benstead & Sons, Maidstone ..	6	6
Dug Flints.		
J. Barrett, Dunton Green	7	0
W. S. Harnett, Newington	6	2
Stoneware Pipes.		
T. Wragg & Sons, Swadlincote	—	

BOGNOR.—For street works in Linden-road and Victoria-drive North, for the Urban District Council. Mr. Oswald H. Bridges, C.E., Bognor :—

W. Port	£2,474	Tate, Bros., Bognor*	£2094

BOREHAM WOOD (Herts).—For six cottages at Boreham Wood, for Mr. Albert Williams. Mr. Henry James Wise, architect, 7, Great James-street, Bedford-row, W.C. :—

Bracey & Clark (Watford)* £1,260

BRISTOL.—For the rebuilding of the Foresters' Arms, for Messrs. Thatcher's Breweries, Ltd. Messrs. C. & C. Thompson, architects, Athenæum-chambers, Bristol. Quantities by Mr. H. J. Pearson, Bristol :—

R. Wilkins & Sons	£1,429	W. & J. Bennett	£1,330
W. Cowlin & Son	1,419	C. A. Hayes	1,323
E. Love	1,387	F. Chown	1,298
W. Foster	1,375	E. C. Norris*	1,205
A. E. Denby & Co.	1,339		

CAMBOIS.—For erecting Mechanics' Institute Lecture Hall and Caretaker's House, for the Workmen and Inhabitants of Cambois Colliery. Mr. T. Tulip, architect, Whinney Hill, Choppington :—

Barron & Temple	£1,710 0 0	R. Baxter	1,651 0 0
J. W. Redford	1,689 16 6	Cook Bros.*	1,594 17 0
J. Maughan	1,662 0 0	Robson & Waddle	1,287 0 0
Gordon Bros.	1,654 3 0		

CARDIFF.—For cast-iron girders, etc., required in the construction of a covered service reservoir, Heath extensions, for the Corporation. Mr. C. H. Priestley, Waterworks Engineer, Town Hall, Cardiff :—

Holwell Iron Co., Ltd., Melton Mowbray £622 3 1

CARDIFF.—For cast-iron socket pipes, etc., for the Corporation. Mr. C. H. Priestley, Waterworks Engineer, Town Hall, Cardiff :—

Holwell Iron Co., Ltd., Melton Mowbray £2,135 6 0

CARDIFF.—For the erection of a covered service reservoir to hold 1,700,000 gallons, at the Heath, for the Corporation. Mr. C. H. Priestley, M.Inst.C.E., Town Hall, Cardiff :—

J. & T. Binnes	£13,935 14 8
T. Taylor	12,118 11 6
W. Williams	10,704 16 6
A. Fasey & Son	9,845 16 1
J. Allan & Son	9,124 10 10
E. Turner & Son	8,323 14 6
C. T. Perkins, Bristol*	8,026 10 0

CARSHALTON.—For erecting a villa at Carshalton, for Mr. J. Garstone, and under the supervision of Mr. A. L. Dartnell, architect, 62, High-street, Croydon :—

W. Martin	£620 0 0	Truett & Steel	£550 0 0
F. Ludlow	618 0 0	W. Roberts	529 9 0
C. Carpenter	578 0 0		

CASTLEFORD.—For improvements in Nicholson-street, for the Urban District Council. Mr. W. Green, Surveyor to Council :—

J. L. Rodgers & Sons, Castleford* .. £1,090 4 6

CATERHAM.—For sanitary annexes, Caterham Asylum, for the Metropolitan Asylums Board. Mr. W. T. Hatch, Engineer and Surveyor to the Board. Quantities by Messrs. John Leaming & Sons :—

J. Ferguson & Co.	£4,000 0 0	R. & E. Evans	£2,769 0 0
Leonard & Mason	3,100 0 0	W. J. Renshaw	2,749 0 0
Enness Bros.	2,940 0 0	H. Line	2,696 0 0
R. A. Dean & Co.	2,869 11 9	C. Jackson	2,689 0 0
Foster Bros.	2,785 0 0	F. J. Webb	2,663 4 0
Gardner & Hazell	2,769 8 7	J. J. Pink	2,530 6 3
		T. Cole, 125 & 127, Offord-road, Barnsbury, N.*	2,328 18 5

[Engineer's estimate, £2,730.]

CATERHAM.—For fire alarms and telephones, Caterham Asylum, for the Metropolitan Asylums Board. Mr. W. T. Hatch Engineer and Surveyor to the Board :—

National Telephone Co., Ltd.	£580 0 0
Sherman, Redfern, & Muston	547 9 0
Jackson Bros.	533 0 0
Willey & Co., Ltd.	520 0 0
J. Bakewell & Co., Ltd.	493 10 0
W. J. Furse	480 0 0
Wright, Methuen, & Co.	462 0 0
Tamplin & Makovski, Ltd.	455 0 0
Private Wire and Telephone Installation Co., Ltd.	401 8 6
J. T. Mayfield & Co.	395 0 0
P. Dewhirst	389 0 0
Sax, Julius, & Co., Ltd.	384 10 0
A. V. Gifkins & Co.	378 0 0
E. T. Mackrill & Sons	375 15 1
E. Newbald & Co.	346 10 4
Baxter & Impey	328 10 0
Cox-Walkers	326 0 0
Gent & Hurley, 44, Belvoir-street, Leicester*	322 15 0
T. Hodgson & Co.	298 0 0

[Engineer's estimate, £520.]

CHELMSFORD.—For a pair of villas on the London-road. Mr. R. Mawhood, architect, Chelmsford :—

F. Johnson	£1,696	W. Samms	£1,530
Choat & Son	1,680	J. Rayner	1,498
Potter & Son	1,650	Moss & Co	1,411
J. Gowers	1,637	E. West, Chelmsford*	1,390
F. Weight	1,590		

COGGESHALL.—For alterations and additions to premises, for the Heart-in-Hand Industrial Co-operative Society, Ltd. Mr. J. W. Clark, architect, Coggeshall :—

Potter & Son	£388	E. Sach, Coggeshall*	£245
Jepp	275	Richards & Son	209
Suckling & Co.	265		

[Architect's estimate, £250.]

DARTFORD (Kent).—For cleaning and painting works at the, Small-pox Hospital for the Metropolitan Asylums Board. Mr. W. T. Hatch, Engineer and Surveyor to the Board :—

J. S. Fenn	£379 10	Enness Bros., Erith*	£268 0
Vigor & Co.	310 0		

[Engineer's estimate, £270 10s.]

DEAL.—For rebuilding the Jolly Gardener public house, etc., for Messrs. Thompson & Son, The Brewery, Walmer. Messrs. W. J. Jennings and J. F. Duthoit, architects, 6, Claremont-place, Dover. Quantities by the architects :—

J. E. Turner	£1,494 9	T. Turner & Co.	£1,415 0
G. B. Cotten	1,490 0	G. H. Denne & Son	1,388 0
W. H. Grigg	1,480 0	J. E. Hayward & Son, Deal*	1,387 0
G. Veeler	1,471 0		
T. T. Denne	1,460 0		
E. Trevers	1,423 0		

DEVONPORT.—For Morice Town School improvements, for the Devonport Education Authority. Mr. H. G. Luff, architect, 64A, Chapel-street, Devonport. Quantities by Mr. I. Harvey, Courtenay-street, Plymouth :—

	Contract A.	Contract B.
James Crockerell	£1,577 0 0	£312 0 0
T. May	1,535 0 0	298 0 0
Blake	1,500 0 0	250 0 0
J. Partridge	1,499 0 0	280 0 0
A. N. Coles	1,496 0 0	318 10 0
A. J. Richards	1,461 0 0	268 10 0
Ambrose Andrews	1,440 0 0	293 0 0
S. Roberts	1,380 0 0	280 0 0
Jenkins	1,361 0 0	315 0 0
Stanbury	1,342 9 2	265 9 0
A. R. Lethbridge & Son	1,225 0 0	265 0 0
Axworthy	1,189 0 0	365 0 0
J. T. Shepherd	1,184 9 5	256 7 7
Pearce Bros.*	1,164 0 0	250 0 0

DORKING.—For the construction of about 5,699 yards of 7in. and 9 in. pipe sewers, with the necessary manholes, lampholes, flushing chambers, etc.; also of sewage-disposal works, pumping station, rising main, roads, etc., at Westcott, in the parish of Dorking Rural, for the Dorking Rural District Council. Mr. W. Rapley, jun., Surveyor, Clovelly, Town-hill, Dorking :—

F. W. Trimm	£9,990 0 0	Streeters & Todhunter	£8,630 0 0
T. Free & Sons	9,648 18 3	E. T. Blomfield	8,417 17 8
G. G. Rayner	9,561 18 0	A. Dixon & Co.	8,350 1 0
H. Roberts	9,071 0 0	J. G. Pickard	8,184 13 11
G. S. Falkner	8,985 0 9	J. W. Dean, Ltd., Birkbeck Bank-chambers, Chancery-lane, W.C.*	7,773 0 4
Peerless-Dennis & Co.	8,869 0 0		
Johnson & Langley	8,642 7 4		
Davies, Ball, & Co.	8,633 19 9		

GATESHEAD.—For erecting a workshop and warehouse in Sun-street, for Mr. H. Hall. Mr. J. M. Dingle, architect, 3, Ocean-road, South Shields. Quantities by Mr. William Morton, Q.S., Sunderland :—

H. & S. Watson	£1,653 16 8
W. Emmet & Co.	1,498 10 9
J. McGowan	1,453 2 1
C. T. George	1,440 0 0
R. M. Gibson	1,421 13 8
W. Franklin	1,408 8 9
J. Bewley	1,400 0 0
J. Hymers	1,386 10 6
J. Milne	1,375 6 0
Glen & Moffett	1,334 7 8
F. Hutchinson	1,326 5 8
H. & B. Arkless	1,315 1 0
W. C. Tyrie	1,311 11 6
J. McElhatton	1,289 4 10
W. Hall	1,288 18 11
R. M. Storey	1,270 7 0
T. & J. White, Newcastle*	1,228 4 3

KIDDERMINSTER.—For cast-iron rising main (water supply works—Contract No. 2), for the Corporation. Messrs. Willcox & Raikes, engineers, 63, Temple-row, Birmingham :—

Biggs, Wall, & Co.	£4,500 16 5	J. W. Dean, Ltd.	£3,525 0 0
C. Jordan & Co.	3,885 0 0	Davis, Ball, & Co., Ltd.	3,515 0 0
H. Roberts	3,713 0 0	T. Vale & Sons	3,450 0 0
Fitzmaurice & Co.	3,706 19 0	G. Law	3,123 13 0
C. Chamberlain	3,544 0 0		

KILLUCAN (co. Westmeath).—For additions and improvements to Rahraney Church, for the Very Rev. M. Dooley. Mr. W. A. Scott, architect, 72, Hollybank-road, Drumcondra, Dublin :—

T. O'Reilly	£949 10 0
P. Hanway, Dublin*	896 0 0

KINGSTON-ON-THAMES.—For alterations to engine-room and coal store, building small office and foundations for new machines, etc., at the workhouse infirmary, for the Guardians. Mr. W. H. Hope, architect, Seymour-road, Hampton Wick. Quantities by the architect :—

W. R. Lane & Son	£2,327 0	A. F. Mitchell	£2,103 9
McDonald Bros.	2,299 0	C. E. Oldridge & Sons, London-road, Kingston-on-Thames*	2,074 10
Mallett & Wood	2,253 0		
W. J. Coleman & Co.	2,170 0		

LONDON SCHOOL BOARD TENDERS.

Hearnville-road Site, Balham, for New School.

Accommodation: Boys, 331; girls, 331; infants, 340; total, 1,002. (School planned for future extension.) Boys' and girls' graded school (two stories)—Halls: Boys, 50 ft. by 26 ft. Girls, 50 ft. by 26 ft. Classrooms: Boys, 56, 50, 45, 45, 45, 45, 45; girls, 56, 50, 45, 45, 45, 45, 45. Infants' school (one story)—Hall, 54 ft. by 26 ft. 6 in. Classrooms, 50, 50, 48, 48, 48, 48. Heating by low-pressure hot-water apparatus and open fires. Area of site, 49,500 square feet. Playgrounds (area per child)—Boys, about 30 square feet; girls and infants, about 26 square feet :—

Holloway Bros., Ltd.	£18,829	Leslie & Co., Ltd.	£18,106
Martin, Wells, & Co., Ltd.	18,807	E. Triggs	18,092
C. F. Kearley	18,688	W. Downs	17,999
W. King & Son	18,481	J. Garrett & Son	17,862
Holliday & Greenwood, Ltd.,	18,154	Stimpson & Co.	17,800
Lathey Bros.	18,141	F. & H. F. Higgs	17,598
		J. Carmichael	17,567
		W. Johnson & Co., Ltd.*	17,146

Deanefield-road Site, Eltham, for New School.

Senior mixed school, 420; junior mixed school, 392; infants' school, 390; total, 1,202. Senior mixed school of one story: Hall, 58 ft. 3 in. by 28 ft. 9 in.; class-rooms, 50, 50, 48, 48, 40, 40, 40, 40, 32, 32. Heating by low-pressure hot-water apparatus. Junior mixed school of one story: Hall, 56 ft. by 28 ft.; classrooms, 56, 56, 48, 48, 48, 48, 48, 40. Heating by low-pressure hot-water apparatus. Infants' school of one story: Hall, 54 ft. by 26 ft. 6 in.; classrooms, 50, 50, 50, 48, 48, 48, 48, 48. Heating by low-pressure hot-water apparatus and open fires. Area of site, 87,120 square ft. Play-grounds, area per child: Senior and junior boys', 39 square feet; girls' and infants', 35 square feet. (An existing house on site will be retained for the use of the schoolkeeper.) :—

W. Johnson & Co., Ltd.	£24,862	E. Lawrence & Sons	£22,692
J. Greenwood, Ltd.	23,441	F. & H. F. Higgs	22,580
J. Smith & Sons, Ltd.	23,296	Treasure & Son	22,561
Martin, Wells, & Co., Ltd.	23,250	Lathey Bros.	22,475
G. E. Wallis & Sons	22,862	Holliday & Greenwood, Ltd.	22,397
Patman & Fotheringham, Ltd.	22,750	J. Garrett & Son	22,389
		Perry & Co.	22,378
		W. Downs	22,373
		J. & C. Bowyer*	21,953

Magdalen-street Temporary School, Horselydown: New School to take the place of existing School.

Accommodation: Junior mixed and infants', total 372. Hall, 51 ft. by 26 ft. Classrooms: 50, 50, 48, 48, 48, 40, 40. Heating by low-pressure hot-water apparatus and open fires. Area of site, 15,200 sq. ft. Playgrounds: Area per child—Junior girls' and infants', 14 sq. ft.; junior boys', 17 sq. ft. (An existing house will be retained for the accommodation of the schoolkeeper.)

Martin, Wells & Co., Ltd.	£9,850	Staines & Son	£8,978
F. & H. F. Higgs	9,548	J. Marsland & Sons	8,855
Rice & Son	9,442	J. Greenwood, Ltd.	8,772
W. Downs	9,380	Stimpson & Co.	8,660
T. L. Green	9,269	J. Garrett & Son	8,601
General Builders Ltd.	9,113	T. D. Leng	8,569
Lathey Bros.	9,027	E. Triggs	8,541
W. King & Son	8,989	Spencer, Santo, & Co., Ltd.	7,947
		Edwards & Medway*	7,400

New End Site, Hampstead, for New School.

Accommodation: Junior mixed, 194; senior mixed, 198; infants, 220; total, 612 (planned for future extension). Three story building with science and art rooms and playground over. School partly built on arches, thus forming covered playground for boys and heating chamber. Junior mixed school: Hall, 40 ft. by 21 ft. 6 in.; classrooms, 56, 50, 48, 40. Senior mixed school: Hall, 40 ft. by 21 ft. 6 in.; classrooms 48, 40, 40, 40, 30. Infants' school: Hall, 39 ft. 3 in. by 21 ft.; classrooms, 60, 56, 56, 48; drawing classroom, 600 ft. area; science room, 600 ft. area. Heating by low-pressure hot-water apparatus and open fires. Also schoolkeeper's house. Area of site, 25,120 sq. ft. Play-grounds, area per child: Boys', senior and junior mixed, about 34 sq. ft.; girls', senior and junior mixed, and infants', about 26 sq. ft.

McCormick & Sons	£22,877	T. L. Green	£20,766
G. S. S. Williams & Son	22,745	Stimpson & Co.	20,750
L. H. & R. Roberts	21,892	C. Miskin & Sons	20,576
Patman & Fotheringham, Ltd.	21,447	C. Dearing & Sons	20,334
F. Gough & Co.	21,387	Treasure & Son	20,329
J. Simpson & Son	21,000	E. Lawrance & Sons*	19,708

New King's-road School, Chelsea: Arrangements for Completion of School.

The Board are now erecting a school on the New King's-road site to provide accommodation for 892 children, the contract date for completion being January, 1905. The school is planned for enlargement by two additional class-rooms on each floor, thus increasing the total accommodation of the school to 1,148 places. The Board of Education have now approved the proposal of the Board to complete the school at once, according to the plans submitted, and the Works Committee recommend that the provision of these additional class-rooms (which will accommodate 256 children) be placed in the hands of Messrs. J. & M. Patrick, the contractors for the new school, as a variation on their contract.

High-street School, Stoke Newington, for Halls and other Improvements.

Boys' department—Providing new hall about 37 ft. by 24 ft. 6 in.; altering and re-arranging existing stair-case; providing new class-room for 40; re-dividing, re-stepping and re-lighting existing classrooms and providing new lavatory. Girls' department—Providing new hall about 37 ft. by 24 ft. 6 in.; removing existing staircase and providing a new one; providing new Teachers' room and water closet; enlarging existing Teachers' room and converting it into classroom for 40; re-dividing, re-stepping and re-lighting existing class-rooms; providing new cloakroom and lavatory. Infants' department—Providing new hall about 37 ft. by 24 ft. 6 in.; enlarging existing Babies' room, re-stepping and converting into classroom for 32; remov-ing stepping from existing room and converting it into a Babies' room for 44; re-dividing, re-stepping and re-lighting existing classrooms. Revised accommoda-tion: Boys, 236; Girls, 213; Infants, 234; total, 683; net loss of 62 places :—

J. Grover & Son	£6,608	L. H. & R. Roberts	£5,842
F. & F. J. Wood	6,255	Clarke & Bracey	5,769
W. Shurmur & Sons, Ltd.	6,225	E. Lawrance & Sons	5,744
W. Gregar & Son	6,171	Perry & Co.	5,639
G. S. S. Williams & Son	6,159	A. Porter	5,595
A. E. Symes	6,069	C. Dearing & Son	5,574
W. M. Dabbs & Son	5,972	Treasure & Son	5,419
McCormick & Sons.	5,925	J. Willmott & Sons	5,270
		J. Chessum & Son*	5,133

Millfields-road School, Clapton, for Additional Heating.

W. G. Cannon & Sons	£286 0	Brightside Foundry & Engineering Co., Ltd.	£241 0
J. & F. May	266 0	R. Clarke	241 0
Purcell & Nobbs	258 0	J. Defries & Sons, Ltd.	225 12
B. Harlow & Son	257 0	Bates & Sons	206 10
J. Wontner-Smith, Gray, & Co.	254 0	Palowkar & Sons*	193 7
Stevens & Sons	253 0		

For Repairs to Heating Apparatus.

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Group 11	Group 12
*Brightside Foundry and Engineering Co., Ltd.	15	15	10	17½	10	17½	12½	7½	7½	7½	10	17½
*Wontner-Smith, Gray & Co.	17½	12½	12½	12½	12½	17½	17½	17½	17½	17½	22½	22½

Mantle-road Site, Brockley: Erection of Junior Mixed School.

Accommodation, 404; hall, 61 ft. 6 in. by 26 ft. 6 in. Class-rooms—Ground floor: 56, 50, 48, 48. First floor: 56, 50, 48, 48, with playground on top of building for junior boys. Heating by low-pressure hot-water apparatus. Playgrounds, area per child: Junior boys, about 16 square feet; junior girls, about 25 square feet;—

T. D. Leng	£11,474	W. Johnson & Co., Ltd.	£10,777
Martin, Wells, & Co., Ltd.	11,248	Lathey Bros.	10,640
Enness Bros.	11,209	W. Downs	10,393
J. Smith & Sons, Ltd.	11,084	J. & M. Patrick	10,314
F. & H. F. Higgs	10,889	Treasure & Son	10,307
E. Lawrance & Sons	10,857	J. & C. Bowyer	10,197
W. J. Mitchell & Son	10,798	G. E. Wallis & Sons	10,177
		J. Garrett & Son*	10,143

Painting the Interior and Exterior of the Albion Hall and Swimming Bath.

C. Willmott & Son	£400 0	A. J. Sheffield	£339 0
J. Dolman & Co.	385 0	W. Silk & Son	302 0
Barrett & Power	365 0	Woollaston Bros.*	258 10
G. Barker	359 0		

STRUCTURAL ALTERATIONS AT VARIOUS SCHOOLS.

(a) *Finsbury—Princeton-street—*

McCormick & Sons	£237	General Builders, Ltd.	£177
M. Pearson	228	Lathey Bros.	167
H. Bouneau	218	T. L. Green	157
J. Stewart	207	Thompson & Beveridge*	148

(b) *West Lambeth—Gideon-road—*

J. & M. Patrick	£322	W. J. Coleman & Co.	£250
Maxwell Bros., Ltd.	297	Rice & Son	243
W. Hammond	295	J. Garrett & Son	233
Lathey Bros.	283	E. B. Tucker	229
E. Triggs	278	Galbraith Bros.*	220

(c) *West Lambeth—Stockwell-road—*

W. Hammond	£131	J. C. Chalkley	£95
Maxwell Bros., Ltd.	130	E. B. Tucker	85
Rice & Son	127	J. Garrett & Son	80
R. S. Ronald	117	Whitehead & Co., Ltd.*	75

(d) *Marylebone—Rhyl-street—*

McCormick & Sons	£490	London School Furniture Co.	£437 4
C. Dearing & Son	460	S. Polden	390 10
Thompson & Beveridge	459	Marchant & Hirst	390 0
Stevens Bros.	450	F. T. Chinchen & Co.	347 10
General Builders, Ltd.	449	Philip King & Co.*	345
G. S. S. Williams & Son	447		

Gainsborough-road School, Hackney Wick, for Providing Ventilating Skylights, etc., in Girls' Department.

A. E. Symes	£415 0	J. Stewart	£314 0
C. Dearing & Sons	340 0	Barrett & Power*	274 2
A. Porter	327 0	J. Willmott & Sons	217 0

"Catherine House," No. 31, Blackheath-road, for Adaptation of Premises for Temporary Special School.

First list of tenders (without quantities):—

G. Kemp	£790	E. Proctor & Son	£683
Thomas & Edge	689	J. & C. Bowyer	645
H. Groves	675	H. Leney & Son	600

As the amount of the lowest tender was in excess of the architect's estimate, the committee were of opinion that fresh tenders should be obtained, and that quantities should be supplied. These tenders have now been received, the amounts of which are as follow. Second list of tenders (with quantities):—

J. C. Chalkley	£854 0	J. & C. Bowyer	£693 0
H. J. Williams	820 3	W. Sayer & Son	675 0
G. Kemp	790 0	E. Proctor & Son	654 0
W. J. Howie	770 0	H. Leney & Son	620 0
Maxwell Bros., Ltd.	720 0	H. Line	589 0
Thomas D. Leng	717 0	H. Groves*	585 0

Buck's-row School, Whitechapel, for Constructing Room for Teachers.

Barrett & Power	£247 10	Woollaston Bros.	£187 10
G. Barker	247 0	J. T. Robey	175 0
A. E. Symes	238 0	A. J. Sheffield*	149 0
Vigor & Co.	189 0		

Montem-street School, Tollington Park, for Enlargement of Boys' Higher Elementary School and provision of Science Room, etc.

Boys' Higher Elementary School — Class-room for 40; Metalwork-room, 795 ft. area; and Physical Laboratory, 832 ft. area. General Science room for Senior Girls, 607 ft. area:—

J. Grover & Son	£4,117	Clarke & Bracey	£3,403
L. H. & R. Roberts	3,914	C. Dearing & Son	3,370
G. S. S. Williams & Son	3,799	Stevens Bros.	3,364
J. Willmott	3,678	Perry & Co.	3,333
F. & F. J. Wood	3,481	E. Laurance & Sons	3,287
McCormick & Sons	3,442	Treasure & Sons*	3,092

Holmes-road School, Kentish Town, for Laundry Centre.

The plans of the proposed Laundry Centre also include draining and tar-paving additional land and providing a coal store:—

McCormick & Sons	£1,189	Stevens Bros.	£1,114
T. L. Green	1,176	Marchant & Hirst	1,085
General Builders, Ltd	1,159	J. Willmott & Sons	1,074
F. Newton	1,157	Treasure & Son	1,035
G. S. S. Williams & Son	1,128	E. Lawrance & Sons*	1,027

Middle-row Site, Kensal New Town—Arrangeemns for the erection of a Manual Training Centre.

The Board of Education, on the 5th March, sanctioned the proposed erection of a Manual Training Centre to accommodate 40 boys on the Middle-row Site, Kensal New Town, to take the place of the present unsatisfactory Centre at Wornington-road School. The Works Committee are of opinion that as Mr. E. Triggs is now engaged in completing the erection of the Junior Mixed department on this Site, opportunity should be taken while he is still on the Site to provide the Manual Centre (the cost of which work is estimated at £947), as a variation on his contract for the Junior Mixed School.

Ensham-street Site, Mitcham-road, Lower Tooting—Arrangements for enlargement of Manual Training Centre.

In connection with the new school recently opened on the Site in Ensham-street, Mitcham-road, Lower Tooting, the Board have erected a Manual Training Centre, which has been planned for extension to accommodate 20 additional boys. The Board of Education, on the 5th March, sanctioned the proposal to enlarge this Centre, and the Committee are of opinion, under the circumstances, that this work (the cost of which is estimated at £475) should be carried out by the Contractors for the new school as a variation on their contract.

St. Paul's-road School, Bow Common—For Drainage and Sanitary Works.

E. Lawrance & Sons	£3,611 0 0	J. Willmott & Sons	£3,305 0 0
A. E. Symes	3,471 0 0	F. & F. J. Wood	3,277 11 6
G. S. S. Williams & Son	3,466 0 0	Lathey Bros.	3,197 0 0
J. Peattie	3,354 0 0	Stevens Bros.	3,156 0 0
R. P. Beattie	3,323 0 0	F. Bull*	3,098 0 0
		A. Porter	2,955 0 0

Moulem-street School, Cambridge Heath, for Sanitary and Drainage Works.

Ashby Bros.	£3,423 0	Stevens Bros.	£2,896 0
A. E. Symes	3,286 0	L. H. & R. Roberts	2,885 0
E. Lawrance & Sons	3,258 0	Ashby & Horner	2,871 0
G. S. S. Williams & Son	3,144 0	F. Bull	2,856 0
F. & F. J. Wood	2,997 0	R. P. Beattie	2,807 18
J. Willmott & Sons	2,916 0	J. Peattie	2,774 0
		A. Porter*	2,570 0

For supply of Map and Diagram Tables.

	Each.		Each.
S. J. Waring & Son, Ltd.	£8 5 0	H. Bouneau	£6 12 6
T. Cruwys	7 10 0	London School Furniture Co.*	6 5 0
T. Wallis & Co., Ltd.	6 19 6	A. Duncan	5 15 0
G. M. Hammer & Co., Ltd.	6 14 0	R. Goodman & Sons	2 15 0
		Previous Prices	5 7 6

Running Contracts for the Supply of Various Articles of Furniture, etc.

	Carpenters' Benches.	Carpenters' Stools.	Forms (for Special Schools).	"T" Slides (for old easels).
	£ s. d.	s. d.	£ s. d.	s. d.
H. Bouneau ..... each	*2 2 0	*8 6	—	1 4
W. Brake & Co. ..... „	2 15 6	9 6	1 5 0	—
T. Cruwys ..... „	—	—	1 2 0	4 0
Educational Supply Association, Ltd. ..... „	3 13 6	10 0	0 13 6	1 4
Galbraith Bros. ..... „	2 5 0	4 9	—	2 0
J. Garvie & Sons ..... „	2 5 0	8 9	—	—
General Builders, Ltd. ..... „	4 7 6	17 6	—	—
Goodall, Lamb, & Heighway, Ltd. ..... „	3 18 6	14 0	—	3 6
R. Goodman & Sons ..... „	—	—	*0 7 9	—
G. M. Hammer & Co., Ltd. ..... „	2 8 0	7 9	0 8 0	1 2
W. H. Lascelles & Co. ..... „	2 19 6	8 6	—	—
London School Furniture Co. ..... „	—	—	0 8 0	*1 1
Marchant & Hirst ..... „	5 0 0	10 6	—	—
North of England School Furnishing Co., Ltd. „	—	—	—	2 0
T. R. Roberts, Ltd. ..... „	—	—	—	1 11½
E. Spencer & Co. ..... „	—	—	—	—
S. J. Waring & Sons, Ltd. ..... „	2 5 0	9 6	—	—
Wrinch & Sons ..... „	—	—	0 18 9	3 4
Previous prices ..... „	—	—	0 9 3	—
	2 2 6	5 9	0 9 0	1 3

William-street School, Hammersmith-road—For Improvements in Boys' and Girls' departments.

Boys' department—Providing hall, about 37ft. by 32ft.; staircase; re-dividing, re-stepping, and re-lighting classrooms; providing lavatory and cloakroom. Girls' department—Providing Hall, about 37ft. by 32ft.; re-dividing, re-stepping and re-lighting classrooms; providing teachers' rooms, cloakroom, lavatory and stock-room; removing Housewifery Centre.

Chas. Wall, Ltd.	£5,415	Martin, Wells & Co., Ltd.	£5,005
G. Neal	5,404	General Builders, Ltd	4,989
C. F. Kearley	5,327	J. Grover & Son	4,851
Rice & Son	5,250	Treasure & Son	4,850
J. Simpson & Son	5,094	Stimpson & Co.	4,770
Lathey Bros.	5,079	Leslie & Co., Ltd.	4,704
E. Triggs	5,041	F. G. Minter*	4,437

Clifton-road School, New Cross, for Rebuilding Offices, etc.

Rebuilding boys' offices and urinal, laying new surface water drains in boys' playground; repairing defective soil pipes; trapping boys' and girls' lavatories, also teachers' lavatories; and carrying out other minor sanitary alterations.

Maxwell Bros., Ltd.	£760 0	J. W. Falkner & Sons	£693 0
J. & C. Bowyer	755 0	W. J. Mitchell & Son*	649 0
R. P. Beattie	746 2		
G. Parker	743 0		

New King's-road School, Fulham, for Heating Apparatus.

W. G. Cannon & Sons	£889	J. C. Christie	£725
G. Davis	820	C. Kite & Co.	725
J. & F. May	800	Brightside Foundry & Engineering Co., Ltd.	703
J. Sloper & Co.	800	J. Wontner-Smith, Gray, & Co.	693
Werner, Pfleiderer, & Perkins, Ltd.	773	B. Harlow & Son	659
J. Williams & Sons, Ltd.	770	Wippell Bros., & Row*	650
Strode & Co.	743		

LONDON. — For cleaning and painting works, Fountain Hospital, for the Metropolitan Asylums Board. Mr. T. W. Hatch, Engineer and Surveyor to the Board:—

H. J. Butcher	£3,240	J. J. Richards	£1,160
J. S. Fenn	2 199	W. J. Coleman & Co.	1,120
F. Green & Sons	1,850	E. Proctor & Son, 328, High-street, Plumstead*	1,004
R. Athey	1,744	P. McCarthy	739
Leonard & Mason	1,725	Excelsior House Painting Co.	385
T. Carr	1,650		
W. A. King	1,302		
Higgs & Hill, Ltd.	1,284		
R. Woollaston & Co.	1,250		
Vigor & Co.	1,240		

[Estimated cost of works, £1,587.]

LONDON.—For Engineers' Tools and Workshop Appliances, etc., Joyce-green Hospital, for the Metropolitan Asylums Board:—

Jukes, Coulson, Stokes & Co.	£173 19 3		
Easterbrook, Allcard & Co., Ltd., Albert Works, Penistone-road, Sheffield*	175 2 1		
W. Newbold & Co.	184 17 3		
Loudon Bros.	188 11 5		
J. Nicholson	210 18 2		
Moorwood, Sons & Co.	214 6 6		
Pryke & Palmer	218 11 10		
Smith Bros.	235 10 0		

[Engineer's estimate, £185.]

LONDON.—For cleaning and painting works, North-Western Hospital, for the Metropolitan Asylums Board. Mr. W. T. Hatch, Engineer and Surveyor to the Board:—

J. S. Fenn	£899	Vigor & Co.	£490
F. Green & Sons	850	E. Proctor & Son	380
T. Webster	780	R. Woollaston & Co.	325
Drake & Son	723	Higgs & Hill, Ltd., Crown Works, South Lambeth*	298
H. Robinson	647	P. McCarthy	261
W. Reason	639		
Bate Bros.	572		
T. Carr	550		

[Engineer's estimate, £344.]

MALLOW (Ireland).—For erecting sixteen artisans' dwellings, for the Urban District Council. Mr. B. E. F. Sheehy, architect, 57, George-street, Limerick:—

T. Gallivan, Killarney £2,416

MIDHURST (Sussex).—For about five and a half miles of stoneware and iron sewers, etc., for the Rural District Council. Messrs. John Taylor, Sons, and Santo Crimp, engineers, 27, Great George-street, Westminster:—

		Time. Months.
A. E. Nunn	£24,117	10
R. H. B. Neal	22,260	10
E. Iles	22,000	12
Higlett & Hammond	21,483	11
G. Bell	19,381	12
Johnson & Langley	19,286	10
B. Cook & Co.	18,452	9
B. Firth & Co.	18,206	12
Streeter & Todhunter	17,658	—
B. W. Primm	17,616	10
J. W. Dean, Ltd.	17,145	8
H. Roberts	16,832	12
J. Moran & Son, Main-road, Dovercourt, Harwich ‡	16,788	8½

‡ Recommended for acceptance.

MORECAMBE.—For the construction of a combined shelter and conveniences on the promenade at Bare, for the Corporation. Mr. J. Bond, Borough Surveyor, Municipal Offices, Morecambe-street:—

J. Parkinson, Contractor, Morecambe* .. £608

NUNEATON.—For the construction of earthenware pipe sewers and surface-water drains in Arbury-road, for the Nuneaton and Chilvers Coton Urban District Council. Mr. F. C. Cook, Engineer, Council Offices, Nuneaton:—

Moss & Son	£2,196 6 6	T. Smith, Nuneaton*	£1,748 5 11
T. Philbrick	2,123 1 2	J. Holme	1,682 13 0
Wilson Bros.	1,823 7 5		
J. & T. Burgoyne	1,811 6 3		

TENDERS—*Continued on page 351*

COMPETITIONS, CONTRACTS, AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open, but not included in this List, see previous issues.)

COMPETITION.

Nature of Work.	By whom Required.	Premiums	Designs to be Delivered
*Public Library	Borough of Stamford	25*l.*, 15*l.*, and 10*l.*	May 31

CONTRACTS.

Nature of Work or Materials.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be Delivered
600 yds. of Galvanised Iron Fencing, Cricket Ground	Weston-super-Mare Cricket Grd. Co.	D. Beak, 2, Arundel-villas, Weston-super-Mare	Mar. 26
Road Material	Wath-upon-Dearne U.D.C.	H. C. Poole, Surveyor, Town Hall, Wath-upon-Dearne	do.
Cast-iron Pipes and Castings (Waterworks Extensions)	East Grinstead R.D.C.	Downes & Cornewall-Walker, Engineers, 45, Warwick-road, Redhill	Mar. 28
Laying and Jointing Water Mains, etc.	do.	do.	do.
Granite Setts	East Ham U.D.C.	A. H. Campbell, Borough Engineer, Town Hall, East Ham	do.
Fourteen Workmen's Dwellings, Upper St. John-st.	Lichfield Sanitary Committee	Emerson Brooke, City Surveyor, Lichfield	do.
Filter Beds and Drains at Sewage Farms, Curborough	do.	do.	do.
Electric Distribution, Dalmuir	Glasgow Corporation	Office of Public Works, City-chambers, 64, Cochrane-st., Glasgow	do.
Roadmaking, etc., South-street	Dorking U.D.C.	G. Somers Mathews, Town Surveyor, Dorking	do.
Decorating, etc., Route of Royal Procession	Decorations Committee, Bradford	F. Stevens, Town Clerk, Town Hall, Bradford	do.
Decorating Interior of St. George's Hall	do.	do.	do.
Materials	Cheadle and Gatley U.D.C.	E. Sykes, C.E., Council Offices, 9, High-street, Cheadle, Manchester	do.
Fire Station at Town's Yard, Cheadle	do.	do.	do.
Materials, etc.	Tonbridge R.D.C.	F. Harris, Engineer, Broadway, Southborough, Tunbridge Wells	do.
Granite	Lampeter Borough Council	D. Thomas, Surveyor, Lampeter, Cardiganshire	do.
Conver. Two Thro' Arches, Gen. Sett'gs to Regen'tors	Cleckheaton U.D.C.	Gas Engineer, Town Hall, Cleckheaton	do.
Widening Flotterstone Bridge (Talla Scheme, Con. 34)	Edinburgh, etc., Water Trustees	W. A. Tait, C.E., 72A, George-street, Edinburgh	do.
Stores	Ashton-under-Lyne Corporation	General Offices, Mossley-road, Ashton-under-Lyne	do.
Flags, Setts, and other materials	do.	Borough Surveyor, Town Hall, Ashton-under-Lyne	do.
Maintenance of Roads	Wigton R.D.C.	W. Brown, Surveyor, Kildare, Wigton	do.
Vestry, etc., Parish Church, Tarves, Scotland	Kirk Session	J. Cobban, Architect, Haddo House, Tarves	do.
Altera., etc., Church Lands Farm, Ottringham, Hull	.....	Freeman, Son, & Gaskell, Arch., Albert-cham., 11, Carr-la., Hull	do.
Shop and Residence, Kilmurry South, Ireland	Mrs. Murphy	A. W. Barnard, Architect, Macroon	do.
Sanitary Work at Town Hall	Maidenhead Town Council	P. Johns, Borough Surveyor, Guildhall, Maidenhead	do.
Paving, etc., Mumbles, near Swansea	Oystermouth U.D.C.	J. H. Robinson, Clerk, Council Offices, Mumbles	do.
Portland Cement	Derwent Valley Water Board	E. Sandeman, Engineer, Bamford, via Sheffield	Mar. 29
Street Works, North Shields and High Chirton	Tynemouth Corporation	I. F. Smillie, Borough Surveyor, Tynemouth	do.
Drain Pipes, Cement, etc.	do.	do.	do.
Laying Cement Concrete Footpaths	do.	do.	do.
12 Dw'ling H'ses & Conveniences, Laird-rd., Wadsley	Anc. Order of Foresters Inves. Assoc	G. Abbott, Secretary, 222, Solly-street, Sheffield	do.
Sewering, Paving, etc., of Eight Streets, Broughton	Salford Corporation	Borough Engineer's Office, Town Hall, Salford	do.
Temperance Hall, etc., Longford	.....	Hague & M'Namara, Architects, 50, Dawson-street, Dublin	do.
Twenty-seven Sets of Main Line Points & Crossings	Glasgow Corporation Gas Dept.	A. Wilson, Engineer, 45, John-street, Glasgow	do.
Water Supply Scheme, Nevin	Lleyn R.D.C.	Minyffynnon, Well-street, Nevin, Wales	do.
*New Coastguard Detachment, near Pembroke	Admiralty	Director of Works Dept., 21, Northumberland-avenue, W.C.	do.
*Disinfector-fit Drying Rms., etc., St. John's-rd. W'h'se	St. Mary, Islington, Guardians	Master of the Workhouse, St. John's-road, Upper Holloway	do.
Surface Water Sewers	Ealing Town Council	C. Jones, M.Inst.C.E., Town Hall, Ealing, W.	Mar. 30
Conversion of Premises in Wade-st. to a Public House	.....	Jackson & Fox, Architects, 7, Rawson-street, Halifax	do.
Granite Setts	Keighley Corporation	W. H. Hopkinson, Borough Engineer, Town Hall, Keighley	do.
Two Sanitary Tumbler Carts	East Stonehouse U.D.C.	F. A. Wiblin, Surveyor, Town Hall, East Stonehouse, Devon	do.
Setts, etc.	Rochdale Paving, etc., Committee	Borough Surveyor's Office, Town Hall, Rochdale	do.
Erection Butcher's Shop, etc., Terrington St. Clement	.....	R. W. Bryant, Terrington St. Clement	do.
Making-up Napier-road, Avonmouth	Barton Regis R.D.C.	H. T. K. Lancaster, Cl'k, Council Offs., S'thend, W'tbury-on-Trym	do.
Free Library and Public Hall, Felinfoel, Wales	.....	W. Griffiths, Architect, Llanelly	do.
Extension to Llanelly Hospital	The Committee	do.	do.
Pair of Semi-detached Villas, Haxby, Yorks.	.....	A. H. Everest, Architect, 8, New-street, York	do.
Wooden Bothies at Hillend	Edinburgh & Dist. Water Trustees	J. Jerdan, Architect, 12, Castle-street, Edinburgh	do.
*Making-up Passage at Rear of Uxbridge-road	Borough of Ealing	Borough Engineer, Town Hall, Ealing, W.	do.
*Three Temporary Schools	K'gs Norton, etc., U.D.C. Edu. Com.	Sur. to the Council, 23, Valentine-rd., King's-heath, nr. Birmingham	do.
Two Houses, Stump Cross, Halifax	.....	A. G. Dalzell, Architect, 15, Commercial-street, Halifax	Mar. 31
Supplies	Warrington Gas Committee	W. S. Haddock, Gas Office, Mersey-street, Warrington	do.
Making-up Streets	Slough U.D.C.	Surveyor to Council, 1, Mackenzie-street Slough	do.
Conver. with Exten. of Premises, Cardiff-rd., Bargoed	Dr. E. R. Bowen	P. Vivian Jones, Architect and Surveyor, Hengoed	do.
42 Tons of 3 in. c.i. Pipes, etc.	Walton-le-Dale, U.D.C.	F. E. Dixon, C.E., 49, Lune-street, Preston	do.
Laying and Fixing Pipes, Penwortham Mill, Main	do.	do.	do.
2,080 super. Yards of Tar Macadam, Wortley Park	Leeds City Council	City Engineer's Office, Municipal-buildings, Leeds	do.
*Conversion of Eight Private Houses into Shops	Empire Freeh'd Developm't Co. Ltd.	Empire Freehold Developm't Co., Ltd., 586, High-rd., Chiswick, W.	do.
Road-making at Hemsworth	Hemsworth R.D.C.	T. H. Richardson, Hemsworth, near Wakefield	April 1
Six Bogie Cars & One Electrically-Driven Water Cart	Reading Corporation	W. Binns, Tramways Office, Mill-lane, Reading	April 2
Two Through Houses, Cheapside, Greetland	.....	Rose and Crown Inn, Greetland, Yorkshire	do.
Sewerage and Sewage Disposal	Toybridge U.D.C.	Cameron, Commin, & Martin, 1, Victoria-street, Westminster, S.W.	do.
Bluestone and Slag	Pocklington R.D.C.	T. Robson, Clerk, Pocklington	do.
Road Metal, Tools, etc.	Staffordshire County Council	J. Moncur, Chief Surveyor of Roads, County-buildings, Stafford	do.
Drain, M'Donald-road Electric Lighting Station	Edinburgh Town Council	R. Morham, City Arch., Pub. W'ks. Office, City-cham., Edinburgh	do.
Red House, Cwmavon-road, Aberavon	E. Evans Bevan	J. Cook Rees, Architect, Neath	do.
Public Library at Skewen	Coedfrane Parish Council	do.	do.
Road Materials	Uttoxeter R.D.C.	J. Preston, Surveyor, Woodlands, Uttoxeter	April 4
Electricity Meters	Edinburgh Corporation	Resident Electrical Engineer, 5, Dewar-place, Edinburgh	do.
Drapery Warehouse, Elgin	Messrs. T. Baxter & Co.	R. B. Pratt, Town and County Bank-buildings, Elgin	do.
Painting and Repairs at Castle Pleasure Grounds	Guildford Town Council	C. G. Mason, Borough Surveyor, Tuns Gate, Guildford	do.
Stores	Lancashire and Yorkshire Railway	Mr. Duffin, Stores Department, Osborne-street, Manchester	do.
Extension of Main Sewer, Furlong-road	Bolton-upon-Dearne U.D.C.	Surveyor to Council, Bolton-upon-Dearne, Rotherham	do.
Storage Reserv'r, etc., Noddsdale Water, Outerwards	Largs Town Council	W. R. Copland, C.E., 146, West Regent-street, Glasgow	do.
Sewerage Works, Auchinblae	Laurence Kirk Com., Kincardinesh'e	Jenkins & Marr, Engineers, 16, Bridge-street, Aberdeen	do.
Dredging, etc., Seven Miles of River Perry, nr. Ruyton	Drainage Commissioners	M. B. Lawford, Clerk to Commissioners, Upper Brook-st., Oswestry	April 5
Alexandra-road Works	Withington U.D.C.	A. H. Mountain, Surveyor to Council, Town Hall West Didsbury	do.
Electric Bed Lift for New Pavilion at Withington	Chorlton Guardians	J. B. Broadbent, A.R.I.B.A., 15, Cooper-street, Manchester	do.
Road Materials	Epsom R.D.C.	T. E. Ware, Surveyor, Waterloo-road, Epsom	do.
100 Fathoms Best Swedish Board Ends	Kingston-on-Thames Guardians	J. Edgell, Clerk, Union Offices, Coombe-road, Kingston	do.
Street Works, Mansfield	.....	R. F. Vallance, Borough Surveyor, Mansfield	do.
Stoneware Sewer	Braintree U.D.C.	H. H. Nankivell, Surveyor, Vestry Hall, Braintree	do.
*Making-up Roads	Beckenham U.D.C.	Council's Surveyor, Beckenham	do.
Works and Materials	Sunderland Corporation	Borough Engineer, Town Hall, Fawcett-street, Sunderland	April 6
Extensions of Kinglassie Cemetery	Kinglassie Parish Council	W. Birrell, Architect, 200, High-street, Kirkcaldy	do.
Granite	Woodhall Spa U.D.C.	J. E. Chatterton, Clerk, Church-lane, Horncastle	do.
Road Metal	Whickham U.D.C.	T. Lambert, Clerk, Town Hall, Gateshead	do.
Church Village Sewage, Llantwit Fardre	Llantrisant, etc., R.D.C.	G. S. Morgan, Engineer, School-street, Pontyclun	do.
Annual Contracts	Leeds Tramways Committee	J. B. Hamilton, Tramways Office, City-square, Leeds	do.
Paving and Flagging Streets	Leeds City Council	City Engineer's Office, Municipal Buildings, Leeds	do.
Bridge, Pontyglazier	St. Dogmell's R.D.C.	A. H. Thomas, A.R.I.B.A., Co. Surveyor's Office, Haverfordwest	do.
*Wiring & Fittings for Elec. Lighting, Napsbury Asy.	County Council of Middlesex	W. H. Massey, 25, Queen Anne's-gate, Westminster, S.W.	do.

CONTRACTS.—*Continued.*

Nature of Work or Materials.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be Delivered
Synchronous Motor Generators at Sub-stations	Manchester Electricity Committee	F. E. Hughes, Sec. of Electricity Dept., Town Hall, Manchester	April 7
Flue-fired Superheaters at Dickin-street Station	do.	do.	do.
Building St. Jude's Church, Swansea	Hon. and Rev. W. Talbot-Rice	E. M. Bruce Vaughan, F.R.I.B.A., Boro'-cham., St. Mary-st., Cardiff	do.
Road Materials	Lanchester R.D.C.	W. Cumming, Highway Surveyor's Office, Lanchester	do.
*Electricity Generating Station	Stepney Borough Council	Borough Engineer, 15, Great Alie-street, Whitechapel, E.	do.
*New Church and Schools, Old Shoreham-road, Hove	.....	E. J. Hamilton, 2, New-road, Brighton	do.
*Nurses Home in Fulham Palace-road	Parish of Fulham	A. Saxon Snell, 22, Southampton-buildings, Chancery-lane, W.C.	do.
Crematorium, City-road Cemetery	Sheffield City Council	C. Hadfield, Architect, Cairns-chambers, St. James's-st., Sheffield.	April 8
Depot, including Fire Station & Mortuary, Selly Oak	King's Norton and Northfield U.D.C.	A. W. Cross, A.M.Inst.C.E., 23, Valentine-road, King's Heath	do.
Cefn Cemetery Extension Works (Contract 2)	Merthyr Tydfil U.D.C.	T. F. Harvey, C.E., Town Hall, Merthyr Tydfil	do.
Materials	Midsomer Norton U.D.C.	Surveyor, Offices of the Council, Midsomer Norton	do.
Excav'ting, Laying, etc., 5¼ miles c.i. Pipes, Masham	Harrowgate Corporation	E. W. Dixon, Engineer, 14, Albert-street, Harrogate	April 9
*Works and Materials for One Year	Paddington Borough Council	Borough Surveyor, Town Hall, Paddington, W.	do.
Sidings, etc., Foss Islands Depot	York Corporation	A. Creer, City Engineer, York	do.
*Road and Sewer Works	Hornsey Town Council	Borough Surveyor, Southwood-lane, Highgate, N.	April 11
R'n'w'l of Superst'cture of Underbridge over R. Isla	Caledonian Railway Company	Divisional Engineer, General Station, Perth	do.
Metalling	St. Mellons R.D.C.	Union Offices, Queen's Hill, Newport, Mon.	do.
Metalling	Magor R.D.C.	do.	do.
1,500 Square Yards of Tarred or Asphalted Footways	Ryton U.D.C.	J. P. Dalton, Surveyor, Council Offices, Ryton-on-Tyne	do.
*Painting, Cleaning, etc., South Branch Library	M.B. of Fulham	Borough Engineer, Town Hall, Fulham, S.W.	do.
Locomotives	Secretary of State for India	Director-General of Stores, India Office, Whitehall, S.W.	April 12
*Building Materials and Tools for Various Prisons	The Prison Commissioners	Prison Commissioners, Home Office, Whitehall, S.W.	do.
Main Drainage of Bannockburn	Stirlingshire County Council	M'Luckie & Walker, C.E., 15, Dumbarton-road, Stirling	do.
Connecting House Drains to New System of Sewerage	Tutbury R.D.C.	Willcox & Raikes, Eng'rs, Union-chambers, 63, Temple-row, Bir'hm	do.
Boundary Wall, etc., to Isolation Hospital, Mortlake	Barnes U.D.C.	G. Bruce Tomes, Surveyor, Council Offices, High-street, Mortlake	do.
Additions, etc., Electricity Station, High-t, Mortlake	do.	do.	do.
*Boundary Wall, Gates, and Fencing, etc.	do.	Council's Engineer, High-street, Mortlake	do.
*Painting & Cleaning, Brook Hospital, Shooter's Hill	Metropolitan Asylums Board	Office of the Board, Embankment, E.C.	do.
Underground Convenience near Pier	Blackpool Corporation	J. S. Brodie, Borough Engineer, Town Hall, Blackpool	April 13
Tramway Extension	Lancaster Tramways Committee	W. A. Tester, Borough Tramways Engineer, Lancaster	April 14
Post Office, Airdrie	Com. of H.M. Works & Public B'ld'gs	The Secretary, Storey's Gate, London, S.W.	do.
High Tension Switchboard	Westminster Electric Supply Corp.	Kennedy & Jenkin, 17, Victoria-street, Westminster, S.W.	April 18
Low Tension Switchboard	do.	do.	do.
60,000 to 70,000 Sleep Blocks, Dundalk	G.N.Ry. Co. (Ireland)	T. Morrison, Secretary, Amiens-street Terminus, Dublin	do.
*Furniture for Schools	West Ham Education Committee	W. Jacques, Architect, 2, Fen-court, E.C.	do.
Additions, etc., to Station Bldgs., Henley-on-Thames	G.W.R.	Office of Engineer, Paddington Station, London	April 19
House at Henley-on-Thames	do.	do.	do.
Branch Railway to Gasworks	Wallasey U.D.C.	J. H. Crowther, Engineer, Gasworks, Wallasey	April 20
*Making-up and Paving Road	Fulham Borough Council	Borough Surveyor, Town Hall, Fulham, S.W.	do.
7,500 ft. Lineal of Granite Channel	Cheshunt U.D.C.	R. H. Jeffs, Engineer, Manor House, Cheshunt	April 21
*Erection of Infirmary, Leigh	The Committee	J. C. Prestwich, Bradshawgate-buildings, Leigh	April 22
Bridge over River Hope, near Hope Ferry	Sutherland County Council	A. Argo, County Clerk, Golspie	April 30
Elec. Equip., Ry. C'toms Bonded Wareh'se, Pt. Natal	Government of Natal	Sir W. Peace, Agent-General, 26, Victoria-street, Westminster	May 9
One 750-kilowatt Direct Current Steam Generator	Council of City of Melbourne	Agent-General for Victoria, 142, Queen Victoria-street, E.C.	May 13
Converting Farm B'ld'gs into Horse-boxes, Blackhall	Carlisle Race Stand Co., Ltd.	Dixon & Mitchell, Devonshire-street, Carlisle	No date
Join'r's and Carp'nt'r's W'k (Labour only), 5 Houses	.....	W. & J. Pogson, Architects, Devonshire-street, Carlisle	do.
Pulling Down and Removal of Sheds	.....	W. F. Bullock, Palace-chambers, Hereford	do.
Theatre Royal, Southgate, Halifax	The Northern Theatre Co., Ltd.	R. Horsfall & Son, Architects, 22A, Commercial-street, Halifax	do.
Town Hall in the Market-place	Corporation of Ossett	W. Hirst, Borough Surveyor, Ossett	do.
Pair of Cottages at Lexden, near Colchester	Regimental Cottage Homes Com.	A. Ainsworth Hunt, Architect, Sudbury	do.
Rebuilding the Robin Hood Inn, Hexham	.....	Liddle & Browne, Arch., Prudential-buildings, Newcastle-on-Tyne	do.
United Methodist Free Church, Whitley Bay	.....	W. H. Knowles, F.R.I.B.A., 37, Grainger-st., Newcastle-on-Tyne	do.
*Chimney Shaft (Labour only)	Holloway Bros. (London), Ltd.	Holloway Bros. (London), Ltd., Belvedere-road, S.E.	do.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Applications to be in
*Clerk of Works	Chorlton, etc., Joint Asylum Com.	4*l.* 4s. per week	April 6
*Borough Surveyor	Borough of Gillingham	300*l.*	April 13
*Assistant Examiner in Office of H.M. Works, etc.	Civil Service Commission	Not stated	April 14
*Clerk of Works	Poplar Union	Not stated	No date

Those marked with an asterisk (*) are advertised in this Number. *Competitions*, iv. *Contracts*, iv. vi. viii. x. xii. *Public Appointments*, xviii.

TENDERS.—*Continued from page 349.*

TOTTENHAM.—For the erection of municipal offices, baths, fire station, firemen's dwellings, mortuary, and coroner's court, for the Tottenham Urban District Council. Messrs. Tayler & Jemmett, architects. Mr. W. H. Prescott, A.M.Inst.C.E., Engineer to Council, Tottenham. Quantities by Messrs. Campbell & Son :—

	Generally to the whole of the Works.	Office Block.	Baths and Chimney Shaft.	Fire Station and Firemen's Quarters.	Coroner's Court, Mortuary, etc.	Total of Tender, using Doulting Stone.	Extra for Portland Stone.	Total of Tender, using Portland Stone.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Albert Monk	2,378 0 0	19,008 0 0	28,956 0 0	6,390 0 0	1,421 0 0	58,153 0 0	605 0 0	58,758 0 0
A. J. Bateman	878 10 11	18,066 14 7	28,957 8 10	6,627 1 10	1,352 17 0	55,882 13 2	990 0 0	56,872 13 2
Thos. Broad, Ltd.	112 15 0	17,132 15 7	28,612 14 1	5,873 6 10	1,242 19 9	52,974 0 0	55 0 0	53,029 0 0
F. & E. Davey, Ltd.	147 0 0	17,720 0 0	26,264 0 0	6,074 0 0	1,352 0 0	51,557 0 0	850 0 0	52,407 0 0
H. Lovatt, Ltd.	709 18 10	17,044 17 6	25,876 6 9	5,819 5 4	1,323 14 9	50,774 3 2	317 1 3	51,091 4 5
Rowley Bros.	428 3 9	17,393 9 11	25,945 11 0	5,683 6 9	1,203 19 6	50,654 10 11	102 10 0	50,757 0 11
B. E. Nightingale	157 0 0	16,650 0 0	26,482 0 0	5,744 0 0	1,274 0 0	50,307 0 0	418 0 0	50,725 0 0
L. Whitehead & Co.	100 0 0	17,130 0 0	26,025 0 0	5,730 0 0	1,215 0 0	50,200 0 0	470 0 0	50,670 0 0
F. Gough & Co.	573 0 0	16,880 0 0	25,652 0 0	5,633 0 0	1,214 0 0	49,952 0 0	650 0 0	50,602 0 0
J. W. Jerram	571 19 6	16,745 6 2	25,587 11 2	5,441 15 9	1,187 4 2	49,533 0 0	1,000 0 0	50,533 0 0
Chas. Wall, Ltd.	265 4 0	17,059 11 8	25,749 17 7	5,619 10 4	1,301 12 0	49,995 0 0	420 12 0	50,415 12 0
C. Miskin & Sons	215 0 0	17,408 0 0	25,204 0 0	5,734 0 0	1,219 0 0	49,780 0 0	300 0 0	50,080 0 0
Todd & Newman	750 0 0	16,369 0 0	25,317 0 0	5,549 0 0	1,242 0 0	49,227 0 0	692 0 0	49,919 0 0
Holliday & Greenwood	250 0 0	16,665 0 0	25,540 0 0	5,540 0 0	1,208 0 0	49,203 0 0	400 0 0	49,603 0 0
F. G. Minter	114 0 0	16,591 0 0	25,898 0 0	5,741 0 0	1,200 0 0	49,544 0 0	—	49,544 0 0
McCormick & Sons	542 0 0	16,397 0 0	25,056 0 0	5,439 0 0	1,166 0 0	48,600 0 0	840 0 0	49,440 0 0
William Downs	595 0 0	16,495 0 0	25,203 0 0	5,356 0 0	1,172 0 0	48,821 0 0	561 0 0	49,382 0 0
Leslie & Co., Ltd.	238 0 0	16,793 0 0	24,888 0 0	5,359 0 0	1,194 0 0	48,472 0 0	785 0 0	49,257 0 0
Walter Wallis	295 2 6	16,375 14 3	24,822 12 10	5,869 3 7	1,248 17 9	48,611 10 11	451 0 0	49,062 10 11
J. Chessum & Sons	396 0 0	16,468 0 0	25,065 0 0	5,430 0 0	1,206 0 0	48,565 0 0	432 0 0	48,997 0 0
H. Knight & Son	116 8 4	16,279 5 3	24,609 10 5	5,429 5 9	1,185 14 9	47,620 10 6	908 0 0	48,528 10 6
Hughes & Stirling	522 17 6	15,875 4 5	24,525 12 3	5,256 18 7	1,203 17 0	47,737 0 0	580 0 0	48,317 0 0
G. Godson & Sons	371 0 0	15,602 0 0	25,173 0 0	5,491 0 0	1,197 0 0	47,834 0 0	440 0 0	48,274 0 0
Arthur Porter	151 16 0	16,112 16 1	24,787 16 8	5,452 13 10	1,160 14 10	47,665 0 0	208 10 7	47,873 10 7
W. Lawrence & Son, Waltham Cross*	112 0 0	15,934 0 0	24,432 0 0	5,304 0 0	1,192 0 0	46,974 0 0	607 10 0	47,581 10 0

NORWICH.—Accepted for painting certain schools, for the Education Committee. Mr. C. J. Brown, architect, Cathedral Offices, The Close, Norwich:—

Angel-road School.

G. Marshall, Heath-road, Norwich ..	£46 0 0

Bull Close-road School.

G. Marshall, Heath-road, Norwich ..	13 5 0

Avenue-road School.

S. H. Wiley, Mancroft-street, Norwich	40 0 0

Rosebery-road School.

J. W. King, Southwell-road, Norwich	11 15 0

Quay Side School.

T. Horth, Magdalen-road, Norwich..	22 0 0

St. Paul's School.

T. Horth, Magdalen-road, Norwich..	9 0 0

Thorpe Hamlet School.

E. E. Huggins, St. Leonard's-road, Norwich	32 0 0

PLYMOUTH.—For the construction of a new wharf in Cattewater Harbour, dredging, &c., for the Council of the Borough. Sir J. Wolfe Barry, Engineer, 21, Delahay-street, Westminster:—

Messrs. Matcham & Co., Mount Pleasant, Plymouth*	20,186 0 0

(The wharf will be 600 ft.)

ROMFORD.—For the erection of an engine-shed and general depot on the Rainham-road, for the Rural District Council. Mr. E. G. Boden, Surveyor, Victoria-chambers, Romford. Quantities by Mr. Ernest J. Little, Brentwood-road, Romford:—

Fasey & Morton	£876 0 10	T. Pearce*	£690 0 0
J. Appleby & Son	780 0 0	Dowsing & Davis	685 0 0
J. S. Hammond & Son	779 0 0	F. Gowan	679 0 0
Myall & Upson.	746 0 0	S. E. Moss & Co.	677 10 0
J. Wilson	745 0 0	C. North	657 0 0
Foster Bros.	716 0 0	T. Bruty	643 0 0
J. Ferguson & Co.	715 16 0	R. Woollaston & Co.	604 0 0
T. G. Sharpington	708 0 0	H. C. Hosswill	590 0 0
A. Gray	698 0 0	W. E. Westgate, Romford*	549 0 0

SANDWICH.—For laying a 9 in. sewer, 1,790 ft. long, for the Town Council. Mr. A. J. Firby, Borough Surveyor, Sandwich:—

J. Weston	£378	E. T. Turner	£241
A. G. Osenton	299	A. W. Simmons	235
J. E. Turner	280	W. Wilson	230
Road Maintenance Co.	249	C. Castle & Co., Westgate-on-Sea*	208
G. Keeler	244		

SURBITON.—For the erection of a Baptist chapel in the Balaclava-road. Mr. Alfred Mason, architect, Broughton-chambers, Surbiton:—

W. H. Young	£2,596 0 0	E. Chamberlain	£2,300 0 0
Lane & Son	2,574 0 0	Gaze & Sons	2,279 0 0
Ellis & Turner.	2,550 0 0	Cropley Bros.	2,197 0 0
Crabb & Son	2,539 0 0	B. E. Nightingale	2,183 0 0
Leonard & Mason	2,535 0 0	Ferguson & Co.	2,170 0 0
Musselwhite & Sapp	2,534 0 0	Braid, Pater, & Co., Ltd.	2,166 0 0
J. Cassé	2,497 0 0	Aldridge & Son	2,149 14 0
H. Bishopp	2,428 10 4	Dean & Co.	2,130 10 0
Rice & Son	2,397 0 0	E. Thorogood	2,120 0 0
G. F. Havell.	2,367 0 0	Foster Bros.	2,111 0 0
E. Alsford	2,350 0 0	F. Hawkey	2,042 0 0
H. Buckingham	2,313 0 0	Gurr & Sons, Chiswick	1,998 10 0

SOUTHAMPTON.—For 750 tons of granite setts, 2,000 cubic yds. of ballast, and 300 tons of cement, for the Corporation. Mr. J. A. Crowther, Borough Engineer:—

Granite Setts.

L. Sommerfeld, London	£1 6 9 per ton.

Ballast.

Crampton & Co., Portsmouth	0 2 8 per cubic yd.

Cement.

W. Dibben, Southampton	1 7 0 per ton.

TIVERTON.—For buildings for electricity works, near the Gasworks. Mr. J. Siddalls, Borough Engineer, Town Hall, Tiverton:—

R. Wilkins & Sons	£1,969 0 0	R. Grater & Sons	£1,546 0 0
W. C. Bennett	1,706 15 0	S. Manning	1,490 2 4
Parr, Thorne, & Stenner	1,633 0 0	J. Grater & Sons	1,484 0 0

TUNBRIDGE WELLS.—For the erection of a house at Penbury, Tunbridge Wells, for Miss Molesworth. Messrs. C. E. Mallows and G. H. Grocock, architects, 28, Conduit-street, Hanover-square, W.:—

Luxford	£4,654	Burr	£4,310
Saint	4,493	Crates & Son	4,250
Soper & Jones	4,460	Strange & Son*	4,070
Mansfield & Son	4,404	Leney & Son	3,980
Jarvis & Son	4,358		

WELLINGTON (Salop).—For pipes, sluices, hydrants, etc., and laying same, for the Urban District Council. Mr. G. Riley, Surveyor, 45, Walker-street, Wellington:—

W. Jowett, Prescot, Lancs.	£1,655 19 7 1,402 6 1

WELLINGTON (Somersetshire).—For sewers and sewage purification works, for the Urban District Council. Mr. C. J. Lomax, A.M.Inst.C.E., 37, Cross-street, Manchester:—

*Follett Bros., Builders, etc., Wellington, Somerset	£14,560 2 3

WEST HAM.—For making-up Cambus-road and Carson-road, for the Borough Council. Mr. John G. Morley, Borough Engineer, Town Hall, West Ham, E.:—

Griffiths & Co., Ltd.	£2038 2 0	Parsons & Parsons	£1819 7 2
J. Jackson	2017 9 0	G. Anderson, Poplar*	1747 18 8
T. Adams	1992 8 0		
D. T. Jackson	1855 1 0		

WIDNES.—For improvements in ten streets and eighteen passages at Simms Cross, for the Corporation. Mr. J. S. Sinclair, A.M.Inst.C.E., Borough Surveyor, Town Hall:—

W. Shepherd	£12,179 5 2
Heaton Bros. & Son	11,722 0 0
H. Garner & W. Gwen	11,039 14 4
W. Standing	10,824 0 0
Executors of late W. F. Chadwick	10,123 2 4
S. Hayward	10,066 16 10
Bennie & Thompson	9,986 12 11
T. Hindley	9,932 8 8
S. Cowburn & Sons, Hindley, Wigan*	8,805 15 4

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